April Rivision

Choose the correct answer:

1)Sum of interior angles of triangles equal .....

a.360 b. 180 c. 540

2) Polygon with 3 sides called .....

a. pentagon b. hexagon c. triangle

3) Type of angle whose measure 90 is .....

a. acute b. obtuse c. right

4) Type of angle whose measure 120 is .....

a. acute b. obtuse c. right

5) Angle whose measure greater than 0 and smaller than 90 is

a. acute b. obtuse c. right

6) Angle whose measure greater than 90 and less than 180 is

a. acute b. obtuse c. right

7) Angle its measure 90 is .....

a. acute b. obtuse c. right

8) Angle its measure 180 is .....

a. acute b. straight c. right

9) Sum of accumulative angle is .....

a. 360 b. 180 c. 120

10) Angle its measure is 210 is .....

a. reflex b. obtuse c. right

11) Angle whose measure greater than 180 and less than 360 is

a. acute b. obtuse c. reflex

12) Sum of two interior non adjacent angle in triangle equal to measure of ……angle

a. interior b. exterior c. reflex

13) Sum of complementary angles …….

a.180 b. 90 c. 360

14) Sum of supplementary angles …….

a.180 b. 360 c. 90

15) The number of axis of symmetry of equilateral triangle is ….

a. 2 b. 3 c. 0

16) The number of axis of symmetry of isosceles triangle is ….

a. 0 b. 3 c. 1

17) The number of axis of symmetry of scalene triangle is ….

a. 1 b. 3 c. 0

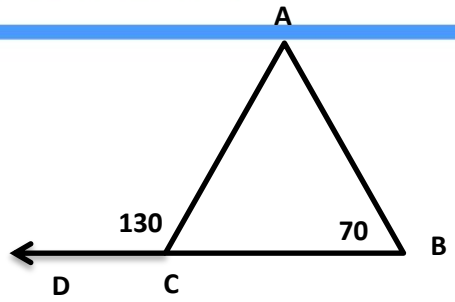
18) In equilateral triangle angles are equal each angle equal …….

a. 90 b. 60 c. 180

19) Sum of measure of exterior angle of equilateral triangle

a. 120 b. 60 c. 180

20) In Δ ABC find m < A= .....



a. 50

b. 60

c. 70

21) Δ ABC , m < A + m < B = m < c then this triangle is .....

a. right b . acute c. obtuse

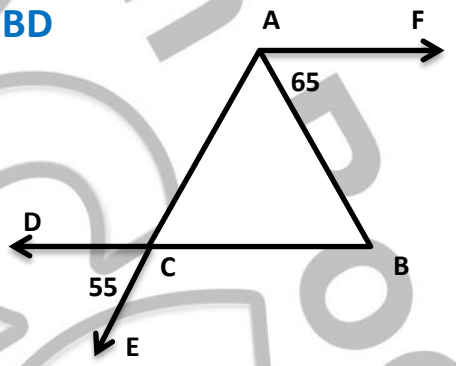
22) Δ ABC , m < A + m < B < m < c then this triangle is .....

a. right b . acute c. obtuse

23) Δ ABC , m < A + m < B > m < c then this triangle is .....

a. right b . acute c. obtuse

24) In Δ ABC find < A= ..... , AF // BD

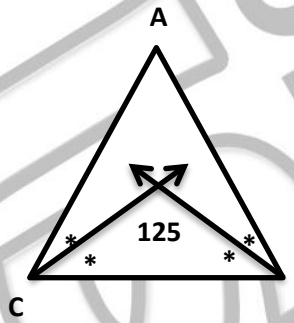


a.65

b.55

c. 60

25) In Δ ABC find < A= .....



a. 55

b. 70

c. 60

26) If Δ ABC is right at B, AB = 20 cm and AC= 25 cm then BC= …cm

a.10 cm b. 15 cm c.25cm

27) If the measure of two angles in triangle are 30° and 50°, then the triangle is

a. acute b. obtuse c. right

28) The longest side in right angle triangle is

a. exterior b. parallel c. hypotenuse

29) The length of the line segment joining the midpoint of two sides of a triangle is equal to ……the length of third side

a. twice b. half c. quarter

30) In Δ ABC , m(< A) = m(<C) – m (<B),m (<B)=50° ,then m(< A)= …….

a. 90° b. 40° c. 50°

31) Rectangle of length 4 cm and width 3 cm, then the length of diagonal =……

a. 3 cm b. 4 cm c. 5 cm

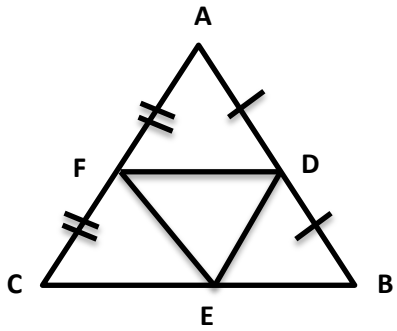
32) ΔABC is right at B , if the measure of the exterior angle at A is 120 ° , then m(<C) = …….

a.90° b. 60 ° c. 30°

33) If area of rectangle is 12cm^2 and its length 4 cm find its diagonal length

a. 3cm b. 5cm c. 6 cm

34) The perimeter of ΔABC is 28cm then the perimeter of $\Delta\ DEF$ = ……..cm



a. 56 cm

b. 14 cm

c. 7 cm

35) In ΔABC ,m (<B)=90°, then $(AB)^2$= ……..

a. $(AC)^2$- $(BC)^2$ b. $(BC)^2$+ $(AB)^2$ c.$(BC)^2$- $(AB)^2$

36) The image of (-4, -3) by translation (x-1, y -2) is

a.(- 5 , -5) b. (-3 , -3) c. (3 , 1)

37) The image of the point A (3, -4) by translation (X + 1, y + 4) is ……

a. (4, 0) b. (4, - 4) c. (3, 0)

38) The image of the point (-3, 4) by translation of magnitude of 4 unit in the positive direction of the y-axis

a.(-7 , 4) b. (1 , 8) c. (-3 , 8)

39) The image of the point (-1 , 2) by translation of magnitude of 3 unit in the positive direction of the x-axis

a. (-1, 5) b. (2, 2) c. (-2, 2)

40) If Ā (3,-3) is the image of A by translation (x - 1, y -4) then the point A is

a.(2 , -7) b. (4 , 1) c. (2 , 1)

41) The number of axis of symmetry of square is .....

a. 2 b. 4 c. 0

42) The number of axis of symmetry of rhombus is .....

a. 2 b. 4 c. 0

43) Number axis of symmetry of circle is

a. 1 b. 2 c. infinite

44) Number axis of symmetry of semicircle is

a. 1 b. 2 c. infinite

45) Number axis of symmetry of parallelogram is

a. 1 b. 2 c. 0

46) Number axis of symmetry of rectangle is

a. 1 b. 2 c. 3

47) Number axis of symmetry of trapezium is

a. 1 b. 2 c. 0

48) Number axis of symmetry of isosceles trapezium is

a. 1 b. 2 c. 4

49) Number axis of symmetry of regular pentagon is

a. 5 b. 4 c. 6

50) Number axis of symmetry of regular hexagon is

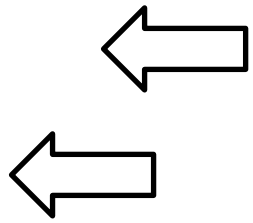
a. 5 b. 6 c. 7

51) The opposite figure is

a. Translation

b. reflection

c. rotation

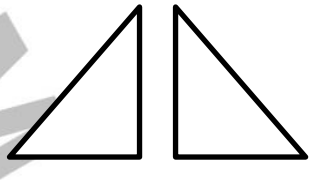


52) The opposite figure is

a. Translation

b. reflection

c. rotation

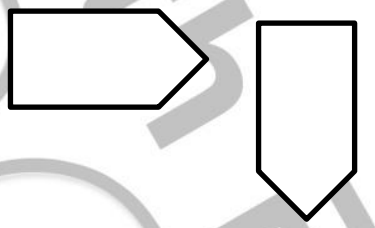


53) The opposite figure is

a. slid

b. flip

c. turn



54) The diagonal in rectangle divided it into two ……..triangle but not axis of symmetry

a. equal b. congruent c. parallel

55) The straight line divided figure into two identical parts is

a. parallel b. perpendicular c. axis of symmetry

56) The image of the point (1, 3) by reflection in the X-axis is

a. (1, - 3) b. (-1, -3) c. (-1, 3)

57) The image of the point (-9 ,- 5) by reflection in the X-axis is

a. (9, - 5) b. (-9, -5) c. (-9, 5)

58) The image of the point (-7, 4) by reflection in the X-axis is

a. (-7, - 4) b. (-7, 4) c. (7, -4)

59) The image of the point (6 ,1) by reflection in the y-axis is

a. (-6 , - 1) b. (-6 , 1) c. (6 , -1)

60) The image of the point (-9,-3) by reflection in the y-axis is

a. (9 , - 3) b. (-9, 3) c. (9, 3)

61) The image of the point (4 ,-7) by reflection in the y-axis is

a. (4 , - 7) b. (-4, 7) c. (-4 , -7)

62) The image of the point (0, 7) by reflection in the .....is itself

a. x – axis b. y- axis c. origin point

63) The image of the point (7, 0) by reflection in the .....is itself

a. x – axis b. y- axis c. origin point

64) The image of the point (8 , 7) by reflection in the origin point is

a. (-8,-7) b. (8,-7) c. (-8, 7)

65) The image of the point (0,0)by reflection in the ……..is itself

a. x – axis b. y- axis c. all previous

66) The image of the point (4,-7) by reflection in the origin point is

a. (- 4 , - 7) b. (- 4, 7) c. (-4 , -7)

67) The image of the point (-3,2) by reflection in the origin point is

a. (- 3 , - 2) b. (3 , -2) c. (-3 , 2)

68) The image of the point (8, 2) by reflection in the origin point is

a. (- 8 , - 2) b. (- 8, 2) c. (8 , -2)

69) The image of the point (3, -2) by reflection in the origin point followed by reflection in x – axis is ……..

a.(3,-2) b. (-3 , 2) c. (-3,-2)

70) The image of the point (8, 9) by reflection in the origin point followed by reflection in y – axis is ……..

a.(8,-9) b. (-8 , 9) c. (-8,-9)

71) The multiplicative inverse of $\sqrt{\frac{4}{25}}$ in the simplest form

a.$\frac{2}{5}$ b.$\frac{-2}{5}$ c.$\frac{5}{2}$

72) The additive inverse of $-\sqrt{\frac{9}{16}}$ in the simplest form

a. $\frac{3}{4}$ b. $\frac{4}{3}$ c. $\frac{-3}{4}$

73)The rational number $6\frac{1}{4}$ in the form $(\frac{a}{b})^2$ is……..

a. $\frac{25}{4}$ b. $\frac{5}{2}$ c. $\frac{2}{5}$

74)If 2x = $\sqrt{36}$,then x= ……..

a. 4 b. 3 c. 2

75) $\frac{x}{2} = \frac{8}{x}$, then x = ...

a. 16 b. $\pm$ 4 c. 4

76) The side length of square whose area 16 x^2 cm^2 = ...cm

a. $\pm$4 x b. 4x c. 8 x

77) $\sqrt{(a+b)^3\,(a+b)}$ = ...

a. $(a+b)^2$ b. $a^4 + b^4$ c. $\pm$ (a + b)^2

78) 2ab = 10 , then 3 ab = ...

a. 5 b. 15 c. 30

79) The S.S of equation $\frac{2a}{3}$ = 8 + 4a in Q is .....

a. { 0 } b. { 2.4} c. { -2.4}

80) If –x < 5 , then .....

a. x > 5 b. x > -5 c. x < -5

81) If x $\in$ N , then S.S of the inequality –x > 3 is .....

a. { 4,5, ...} b. $\emptyset$ c. { -4 , -5 , ...}

82) The S.S of the inequality -2x < zero in Q is .....

a. $\emptyset$ b. Q_+ c. Q_-

83) If x $\in$ Z , then the S.S of the inequality 20 < 5x < 25 is

a. { 4 , 5 } b. $\emptyset$ c. { 3 }

84) If x > 5 , then –x .....

a. > -5 b. < -5 c. >5

85)If x + 9 = 11 , then the value of 7x = ...

a. 2 b. 20 c. 14

86) If a = 0.000625 , then $\sqrt{a}$ = 2.5 × $10^{.....}$

a. 2 b. -2 c. 3

87) If 74500000= 7.45 × 10^{n} , then n = ...

a. 6 b. 7 c. -7

88) 3.35 × 10^{-3}= .....

a. 335000 b. 0.00335 c. 0.0335

89) 0. 00073 = 7.3 × 10^{n} , then n = ...

a. -4 b. 4 c. 7

90) 4 × 2^{3} – 20 =.....

a. -48 b. 4 c. 12

91) If 2x = 4 , then 3x+ 1 =.....

a. 2 b. 7 c. 4

92) If the age of a man x now, then his age 9 years ago is .....

a. x + 9 b. x - 9 c. 9x

93)If $\frac{26}{x}$ + 1 = 14 , then x = ...

a. 2 b. 10 c. 13

94) If 3x + 1 $\geq$ 10, then S.S in Z is .....

a. { 3, 4 , 5} b. { 4 , 5 , ...} c. { 3 ,4 ,5 , ...}

95) If x= 0.0009 , then $\sqrt{x}$ = ...

a. 0.03 b. 0.003 c. 0.0003

96) The perimeter of square whose side length L= .....

a.4 + L b. 4 – L c. 4 L

97) The perimeter of rhombus whose side length L= .....

a.4 + L b. 4 – L c. 4 L

98) The side length of an equilateral triangle is L and its perimeter is : P = ...

a.L + 3 b. $\frac{1}{3}$ L c. 3 L

99) If $\frac{6x}{5}$ = -2 , then 3x = ...

a. -10 b. -5 c. $\frac{-5}{3}$

100) Find the number if we added to its three times the result will be 28

a. 9 b. 8 c. 7

101) Order of performing the mathematical operation in an expression has .....from left to right

a. power, × , ÷ , + , - b. - , + , ÷ c. ÷ , × , + , -

102) If –x < 7 , then .....

a. x < 7 b. x > -7 c. x > 7

Exercises

[B] Choose the correct : -

1	0.00027 = ... A) 2.7×10^{-4} B) 2.7×10^{-5} C) 2.7×10^{-6} D) 2.7×10^{-7}	
2	0.0000027 = ... A) 2.7×10^{-4} B) 2.7×10^{-5} C) 2.7×10^{-6} D) 2.7×10^{-7}	
3	0.00032 = ... A) 3.2×10^{-4} B) 3.2×10^{-5} C) 3.2×10^{-6} D) 3.2×10^{-7}	
4	0.0000032 = ... A) 3.2×10^{-4} B) 3.2×10^{-5} C) 3.2×10^{-6} D) 3.2×10^{-7}	
5	0.00000052 = ... A) 5.2×10^{-4} B) 5.2×10^{-5} C) 5.2×10^{-6} D) 5.2×10^{-7}	
6	0.000052 = ... A) 5.2×10^{-4} B) 5.2×10^{-5} C) 5.2×10^{-6} D) 5.2×10^{-7}	
7	0.00000087 = ... A) 8.7×10^{-4} B) 8.7×10^{-5} C) 8.7×10^{-6} D) 8.7×10^{-7}	
8	0.000087 = ... A) 8.7×10^{-4} B) 8.7×10^{-5} C) 8.7×10^{-6} D) 8.7×10^{-7}	
9	The number 60 000 in the standard form $a \times 10^n$, $n \in \mathbb{Z}$ is ..... A) 6×10^4 B) 6×10^5 C) 6×10^6 D) 6×10^7	
10	The number 6000 000 in the standard form $a \times 10^n$, $n \in \mathbb{Z}$ is ..... A) 6×10^4 B) 6×10^5 C) 6×10^6 D) 6×10^7	
11	The number 70 000 in the standard form $a \times 10^n$, $n \in \mathbb{Z}$ is ..... A) 7×10^4 B) 7×10^5 C) 7×10^6 D) 7×10^7	

12	The number 7000 000 in the standard form $a \times 10^n$, $n \in \mathbb{Z}$ is ..... A) 7×10^4 B) 7×10^5 C) 7×10^6 D) 7×10^7	
13	The number 9000 in the standard form $a \times 10^n$, $n \in \mathbb{Z}$ is ..... A) 9×10^3 B) 9×10^4 C) 9×10^5 D) 9×10^6	
14	The number 900 000 in the standard form $a \times 10^n$, $n \in \mathbb{Z}$ is ..... A) 9×10^3 B) 9×10^4 C) 9×10^5 D) 9×10^6	
15	Number 75000 is in its scientific notation = 7.5×10^n , n = ... A) 4 B) 5 C) 6 D) 7	
16	Number 7500 000 is in its scientific notation = 7.5×10^n , n = ... A) 4 B) 5 C) 6 D) 7	
17	Number 31000 is in its scientific notation = 3.1×10^n , n = ... A) 4 B) 5 C) 6 D) 7	
18	Number 3 100 000 is in its scientific notation = 3.1×10^n , n = ... A) 4 B) 5 C) 6 D) 7	
19	2.37×10^{-2} = ... A) 0.0237 B) 0.00237 C) 0.000237 D) 0.0000237	
20	2.37×10^{-4} = ... A) 0.0237 B) 0.00237 C) 0.000237 D) 0.0000237	
21	5.9×10^{-2} = ... A) 0.059 B) 0.0059 C) 0.00059 D) 0.000059	
22	5.9×10^{-4} = ... A) 0.059 B) 0.0059 C) 0.00059 D) 0.000059	
23	1.4×10^{-4} = ... A) 0.00014 B) 0.000014 C) 0.0000014 D) 0.00000014	
24	1.4×10^{-6} = ... A) 0.00014 B) 0.000014 C) 0.0000014 D) 0.00000014	

25	The number which is in the standard of the following numbers is ..... A) 1.1×10^{8} B) 27×10^{-5} C) 10×10^{-3} D) 0.87×10^{8}	
26	The number which is in the standard of the following numbers is ..... A) 100×10^{8} B) 27×10^{-5} C) 1.5×10^{-3} D) 0.87×10^{8}	
27	The number which is in the standard of the following numbers is ..... A) 4.5×10^{8} B) 36×10^{-5} C) 80×10^{-3} D) 79×10^{8}	
28	The number which is in the standard of the following numbers is ..... A) 45×10^{8} B) 36×10^{-5} C) 8×10^{-3} D) 79×10^{8}	
29	The number which is in the standard of the following numbers is ..... A) 4×10^{8} B) 50×10^{-5} C) 90×10^{-3} D) 20×10^{8}	
30	The number which is in the standard of the following numbers is ..... A) 40×10^{8} B) 50×10^{-5} C) 9×10^{-3} D) 20×10^{8}	
31	37×10^{4} = ... A) 3.7×10^{3} B) 3.7×10^{4} C) 3.7×10^{5} D) 3.7×10^{6}	
32	37×10^{4} = ... A) 3.7×10^{3} B) 3.7×10^{4} C) 3.7×10^{5} D) 3.7×10^{6}	
33	Which of the following is the greatest ? ..... A) 1.2×10^{3} B) 2.4×10^{4} C) 3.5×10^{5} D) 5.6×10^{6}	
34	Which of the following is the greatest ? ..... A) 1.2×10^{3} B) 2.4×10^{8} C) 3.5×10^{5} D) 5.6×10^{6}	
35	Which of the following is the greatest ? ..... A) 2.3×10^{4} B) 2.3×10^{5} C) 3.2×10^{4} D) 3.2×10^{5}	
36	IF : $(0.005)^{2} = 25 \times 10^{n}$, then n = ... A) – 5 B) – 6 C) – 7 D) – 9	
37	IF : $(0.00005)^{2} = 25 \times 10^{n}$, then n = ...	

	A) – 9 B) – 5 C) – 7 D) – 10	
38	The standard form of the number 7 hundred thousands ..... A) 7×10^3 B) 7×10^4 C) 7×10^5 D) 7×10^6	
39	The standard form of the number 7 millions is ..... A) 7×10^3 B) 7×10^4 C) 7×10^5 D) 7×10^6	
40	The standard form of the number 0.7×0.0005 = ... A) 3.5×10^{-3} B) 3.5×10^{-4} C) 3.5×10^{-5} D) 3.5×10^{-6}	
41	The standard form of the number 0.7×0.000005 = ... A) 3.5×10^{-3} B) 3.5×10^{-4} C) 3.5×10^{-5} D) 3.5×10^{-6}	
42	$2 \times 5 - 6 \div 2$ = ... A) 4 B) 7 C) 10 D) 15	
43	$3 \times 2 - 16 \div 8$ ..... A) 4 B) 8 C) 10 D) 15	
44	$12 \div 3 + 3 \times 2$ = ... A) 4 B) 8 C) 10 D) 15	
45	$8 + 14 \div 2 - 5$ = ... A) 4 B) 8 C) 10 D) 15	
46	$4^2 \div 2 \times 3 - 9$ = ... A) 4 B) 8 C) 10 D) 15	
47	$12(2^2) \div 24 + 3^2$ = ... A) 4 B) 11 C) 10 D) 15	

1	A
2	C
3	A
4	C
5	D
6	B
7	D
8	B
9	A
10	C
11	A
12	C
13	A
14	C
15	A
16	C
17	A

18	C
19	A
20	C
21	A
22	C
23	A
24	C
25	A
26	C
27	A
28	C
29	A
30	C
31	C
32	C
33	D
34	B

35	D
36	B
37	D
38	C
39	D
40	B
41	D
42	B
43	A
44	C
45	C
46	D
47	B

Exercises

[B] Choose the correct : -

1	$\sqrt{25}$ = ... A) 5 B) 3 C) 4 D) 6	
2	$\sqrt{16}$ = ... A) 5 B) 3 C) 4 D) 6	
3	$\sqrt{\frac{4}{9}}$ = ... A) $\frac{2}{3}$ B) $\frac{3}{4}$ C) $\frac{5}{7}$ D) $\frac{1}{5}$	
4	The number $\sqrt{0.09}$ is ..... A) natural B) positive integer C) negative integer D) rational	
5	The number $\sqrt{0.25}$ is ..... A) natural B) positive integer C) negative integer D) rational	
6	$\sqrt{(-6)^2}$ = ... A) 4 B) 5 C) 6 D) 7	
7	$\sqrt{(-7)^2}$ = ... A) 4 B) 5 C) 6 D) 7	
8	$\sqrt{10^2 - 8^2}$ = ... A) 8 B) 6 C) 4 D) 3	
9	$\sqrt{(-9)^2 + (-12)^2}$ = ... A) 5 B) 10 C) 15 D) 20	
10	$\sqrt{(-12)^2 + (-16)^2}$ = ... A) 5 B) 10 C) 15 D) 20	
11	$\sqrt{625 - (-15)^2}$ = ... A) 3 B) 6 C) 12 D) 20	

12	$\sqrt{100-(-8)^2}$ = ... A) 3 B) 6 C) 12 D) 20	
13	The additive inverse of $-\sqrt{\frac{4}{49}}$ is ..... A) $\frac{3}{5}$ B) $-\frac{3}{5}$ C) $\frac{2}{7}$ D) $-\frac{2}{7}$	
14	The multiplicative inverse of $\sqrt{\frac{9}{25}}$ is ..... A) $\frac{7}{2}$ B) $-\frac{7}{2}$ C) $\frac{5}{3}$ D) $-\frac{5}{3}$	
15	The multiplicative inverse of $-\sqrt{\frac{9}{25}}$ is ..... A) $\frac{7}{2}$ B) $-\frac{7}{2}$ C) $\frac{5}{3}$ D) $-\frac{5}{3}$	
16	$\sqrt{36+64}$ = 5 + ... A) 4 B) 5 C) 7 D) 3	
17	$\sqrt{25-16}$ = 1 + ... A) 0 B) 1 C) 2 D) 3	
18	$\sqrt{25-16}$ = 3 + ... A) 0 B) 1 C) 2 D) 3	
19	the side length of a square whose area 25 cm^2 is ..... cm A) 3 B) 4 C) 5 D) 6	
20	the side length of a square whose area 9 cm^2 is ..... cm A) 3 B) 4 C) 5 D) 6	
21	the side length of a square whose area 16 X^2 cm^2 is ..... cm A) 3 X B) 4 X C) 5 X D) 6 X	
22	the side length of a square whose area 25 X^2 cm^2 is ..... cm A) 3 X B) 4 X C) 5 X D) 6 X	
23	the side length of a square whose area 16 X^6 cm^2 is ..... cm	

	A) $3\ X^3$ B) $4\ X^3$ C) $5\ X^3$ D) $6\ X^3$	
24	the side length of a square whose area $25\ X^6\ cm^2$ is ..... cm A) $3\ X^3$ B) $4\ X^3$ C) $5\ X^3$ D) $6\ X^3$	
25	$\sqrt{36\ a^8}$ = ... A) $2\ a$ B) $3\ a^2$ C) $5\ a^3$ D) $6\ a^4$	
26	The multiplicative inverse of $\sqrt{2\frac{1}{4}}$ is ..... A) $\frac{2}{5}$ B) $\frac{3}{4}$ C) $\frac{3}{5}$ D) $\frac{2}{3}$	
27	The multiplicative inverse of $\sqrt{6\frac{1}{4}}$ is ..... A) $\frac{2}{5}$ B) $\frac{3}{4}$ C) $\frac{3}{5}$ D) $\frac{2}{3}$	
28	If : A = 0.000625 , then : $\sqrt{A}$ = $2.5 \times 10^{\cdots\cdots}$ A) – 1 B) – 2 C) – 3 D) – 4	
29	If : A = 0.0000000625 , then : $\sqrt{A}$ = $2.5 \times 10^{\cdots\cdots}$ A) – 1 B) – 2 C) – 3 D) – 4	
30	If: 3 X = 21 , then X = ... a) 28 b) 40 c) 16 d) 7	
31	If 2 ab = 10 , then: 3 a b = ... a) 5 b) 6 c) 15 d) 30	
32	If: 3 X = 5 , then the value of 12 X = ... a) 4 b) 36 c) 20 d) 60	
33	If : 5 X = 20 , then X + 3 =..... a) 16 b) 12 c) 17 d) 7	
34	If: 5 X = 35 5 then 2 X + 1 = ... a) 7 b) 8 c) 15 d) 71	
35	The S.S. of the equation : X + 3 = 3 , in $\mathbb{N}$ is ..... a) 0 b) {0} c) {3} d) {6}	

36	, The S.S. of the equation : $X + 3 = 3$, in $\mathbb{Z}$ is ..... a) 0 b) {0} c) {3} d) {6}	
37	If : $X + 9 = 11$, then $7X =$ ..... A) 14 B) 28 C) 4 D) – 20	
38	If $X + 9 = 11$, then $2X =$ ..... A) 14 B) 28 C) 4 D) – 20	
39	The solution set of the equation : $X - 2 = 3$, in $\mathbb{N}$ is ..... A) 5 B) { 5 } C) 4 D) – 20	
40	If: $X - 2 = 3$, then the value of $5X =$ ..... A) 36 B) 25 C) $\varnothing$ D) 8	
41	If $3X + 1 = 25$, then $X =$ ..... A) 36 B) 25 C) $\varnothing$ D) 8	
42	The solution set of the equation : $-2X + 1 = -3$, in $\mathbb{Z}$ is ..... a) { 13 } b) { 2 } c) { 7 } d) zero	
43	If $2X = 5X$, then $X =$ ..... a) { 13 } b) { 2 } c) { 7 } d) zero	
44	If $3X = 12$, then $4X + 1 =$ ..... a) 14 b) 15 c) 16 d) 17	
45	If $4X = 20$, then $3X - 1 =$ ..... a) 14 b) 15 c) 16 d) 17	
46	If $5X = 15$, then $2^X =$ ..... a) 2 b) 8 c) 3 d) 9	
47	The age of Aly now is X years , then his age 4 years ago is ..... years. a) $4X$ b) $4 + X$ c) $4X$ d) $X - 4$	
48	Ali's age 2 years ago was X , then his age now is..... years. a) $X + 2$ b) $X - 2$ c) $2 - X$ d) $2X$	
49	If X is an odd natural number then the next odd number directly is ..... a) $X + 1$ b) $X + 2$ c) $2X + 1$ d) $2X$	
50	If : $X = \sqrt{\frac{1}{9}}$, then $X^3 =$ ..... A) 1/3 B) 1/9 C) 1/81 D) 1/27	

1	A
2	C
3	A
4	D
5	D
6	C
7	D
8	B
9	C
10	D
11	D
12	B
13	D
14	C
15	D
16	B
17	C
18	A
19	C

20	A
21	B
22	C
23	B
24	C
25	D
26	D
27	A
28	B
29	D
30	D
31	C
32	C
33	D
34	C
35	B
36	B
37	A
38	C
39	B

40	B
41	D
42	B
43	D
44	D
45	A
46	B
47	D
48	A
49	B
50	D

Exercises

[A] Complete the following : -

1	If a > b , then a + c ..... b + c A) < B) > C) = D) ≥
2	If A > C , then A + Z ..... C + Z A) < B) > C) = D) ≥
3	If a > b , then a – c ..... b – c A) < B) > C) = D) ≥
4	If X > Y , then X – Z ..... Y – Z A) < B) > C) = D) ≥
5	If A > B , " C " is positive then A × C ..... B × C A) < B) > C) = D) ≥
6	If X > Y , " Z " is positive then X × Z ..... Y × Z A) < B) > C) = D) ≥
7	If A > B , " C " is positive then A ÷ C ..... B ÷ C A) < B) > C) = D) ≥
8	If X > Y , " Z " is positive then X ÷ Z ..... Y ÷ Z A) < B) > C) = D) ≥
9	If A > B , " C " is negative then A × C ..... B × C A) < B) > C) = D) ≥
10	If X > Y , " Z " is negative then X × Z ..... Y × Z A) < B) > C) = D) ≥
11	If A > B , " C " is negative then A ÷ C ..... B ÷ C A) < B) > C) = D) ≥
12	If X > Y , " Z " is negative then X ÷ Z ..... Y ÷ Z A) < B) > C) = D) ≥
13	If : – X < 3 , then X ..... – 3 A) < B) > C) = D) ≥
14	If : – X < 4 , then ..... A) X > 4 B) X > – 4 C) X < 4 D) X < – 4

15 If : X > Y , then – X ..... – Y
A) < B) > C) = D) ≥

16 If : a > b , c is a negative number , then ac ..... bc
A) < B) > C) = D) ≥

17 If : X < 4 , then – X ..... – 4
A) < B) > C) = D) ≥

18 If : – X > 3 , then .....
A) X > 3 B) X > – 3 C) X < 3 D) X < – 3

19 If : – X > 4 , then .....
A) X > 4 B) X > – 4 C) X < 4 D) X < – 4

20 If : – 2 X < 4 , then .....
A) X > – 2 B) X < – 6 C) X < 2 D) X < – 2

21 $X < \frac{5}{2}$ equivalent .....
A) X > 5/2 B) X > 5 C) 2 X < 5 D) 5 X < 2

22 If : X + 3 > 5 , then X may be equal .....
A) 5 B) 1 C) – 5 D) – 2

23 The solution set of the inequality : X < 2 in $\mathbb{N}$ is .....
a) { 0 } b) { 1 } c) { 0 , 1 } d) $\varnothing$

24 The S.S. of the inequality: 2 X + 1 ≥ 1 in $\mathbb{N}$ is .....
a) $\mathbb{Z}^+$ b) $\varnothing$ c) $\mathbb{N}$ d) { 0 }

25 The S.S. of the inequality 2 X + 1 ≥ 0 in $\mathbb{N}$ is .....
a) $\mathbb{Z}^+$ b) $\varnothing$ c) $\mathbb{N}$ d) { 0 }

26 The S.S. of the inequality : – X ≥ 1 in $\mathbb{N}$ is .....
a) { 0 } b) { 0,1 } c) { 1 } d) $\varnothing$

27 2 X + 1 = 13 , then : X = ...
A) 1 B) 2 C) 3 D) 4

28 3 X + 1 = 7 , then : X = ...
A) 1 B) 2 C) 3 D) 4

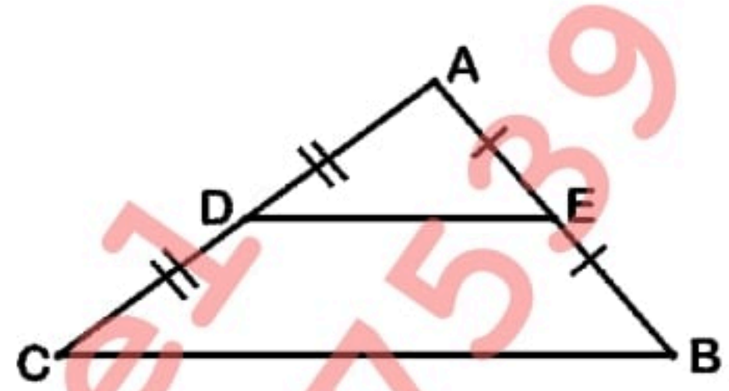
29 5 X – 1 = 14 , then : X = ...
A) 1 B) 2 C) 3 D) 4

30	The number which we add 2 to it , then the result equals 3 , is ..... A) 1 B) 2 C) 3 D) 4	
31	The number which we add 4 to it , then the result equals 7 , is ..... A) 1 B) 2 C) 3 D) 4	
32	The number which we add 6 to it , then the result equals 10 , is ..... A) 1 B) 2 C) 3 D) 4	
33	The number which we subtract mm from it the result equals 10 , is ..... A) 1 B) 2 C) 3 D) 4	
34	The number which we subtract 2 from it the result equals 2 , is ..... A) 1 B) 2 C) 3 D) 4	
35	The number which we subtract 4 from it the result equals 7 , is ..... A) 1 B) 2 C) 11 D) 4	
36	The number which we add 6 to its twice , then the result equals 14 , is ..... A) 4 B) 2 C) 3 D) 4	
37	The number which we add 2 to its twice , then the result equals 8 , is ..... A) 4 B) 2 C) 3 D) 4	
38	The number which we add 6 to its twice , then the result equals 16 , is ..... A) 4 B) 5 C) 3 D) 4	
39	If we add a number to its double the result equal 12, then the number is ..... A) 6 B) 2 C) 3 D) 4	
40	If we add a number to its double the result equal 6, then the number is ..... A) 6 B) 2 C) 3 D) 4	
41	The number which if we add it to its three times the result is 20 is ..... A) 5 B) 6 C) 7 D) 8	
42	The number which if we add it to its three times the result is 32 is ..... A) 5 B) 6 C) 7 D) 8	
43	The sum of two consecutive numbers is 13 then the two numbers are ..... A) 5 , 6 B) 6 , 7 C) 7 , 8 D) 8 , 9	
44	The sum of two consecutive numbers is 11 then the two numbers are ..... A) 5 , 6 B) 6 , 7 C) 7 , 8 D) 8 , 9	

1	B
2	B
3	B
4	B
5	B
6	B
7	B
8	B
9	A
10	A
11	A
12	A
13	B
14	B
15	A
16	A
17	B
18	B
19	D

20	A
21	C
22	A
23	C
24	A
25	C
26	D
27	D
28	B
29	C
30	A
31	C
32	D
33	C
34	D
35	C
36	D
37	C
38	B
39	D

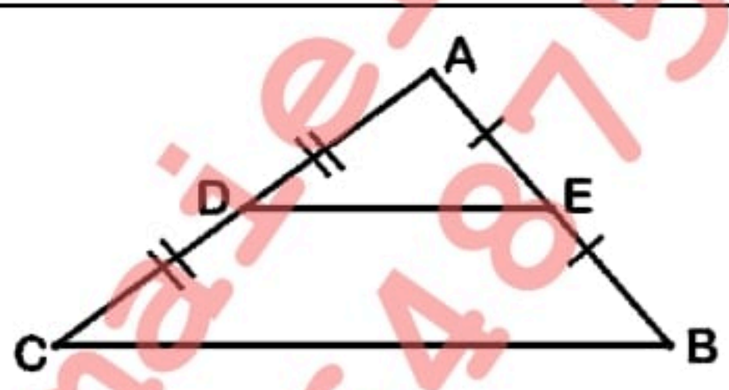
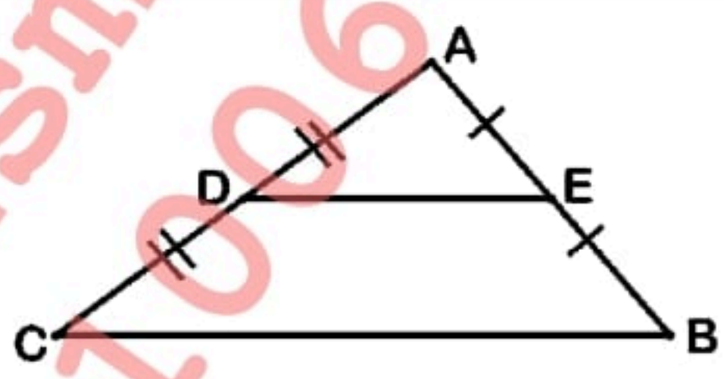
40	B
41	A
42	D
43	B
44	A

6	**Corollary** The line segment joining the midpoints of two sides of a triangle is parallel to the third side D is he midpoint of AC and E is he midpoint of AB Then: $\overline{ED}$ // $\overline{AB}$ **Theorem [3]** The length of the line segment joining the midpoints of two sides of a triangle is equal to half the length of the third side D is he midpoint of AC and E is he midpoint of AB Then: DE = half of BC	

Exercises

[B] Choose the correct : -

1	The sum of the measures of the interior angles of a triangle is .....° a) 180 b) 90 c) 270 d) 360	
2	The sum of the interior angles of an isosceles triangle =..... a) 180° b) 90° c) 60° d) straight	
3	The sum of the measures of the interior angles of a triangle = the measure of the ..... angle. a) acute b) right c) obtuse d) straight	
4	The right-angled triangle has ..... right angle. a) 1 b) 2 c) 0 d) 3	
5	The obtuse -angled triangle has ..... obtuse angle. a) 1 b) 2 c) 0 d) 3	
6	The sum of the measures of the exterior angles of triangle = ... a) 90° b) 180° c) 360° d) 120°	
7	The measure of the exterior angle of the equilateral triangle = ... a) 60° b) 120° c) 30° d) 360°	
8	The length of the line segment joining the midpoints of two sides of a triangle is equal to ..... the length of the third side. a) half b) quarter c) twice d) third	

9	The length of the line segment joining between two midpoints of two sides of a triangle= ..... length of its third side. A) 1/2 B) 1/4 C) 1/3 D) 1/5	
10	The line segment joining the midpoints of two sides of a triangle is ..... the third side. a) perpendicular to b) equal to c) parallel to d) bisect to	
11	In the opposite figure : BC : DE = ... a) 1 : 3 b) 3 : 1 c) 1 : 2 d) 2 : 1	
12	In the opposite figure : DE : BC = ... a) 1 : 3 b) 3 : 1 c) 1 : 2 d) 2 : 1	
13	If the sum of measures of two interior angles of a triangle is 80° , then the type of this triangle according to its angles is ..... - angled triangle. a) obtuse b) right c) acute d) otherwise	
14	If the sum of measures of two interior angles of a triangle is 70° , then the type of this triangle according to its angles is ..... - angled triangle. a) obtuse b) right c) acute d) otherwise	
15	If the sum of measures of two interior angles of a triangle is 90° , then the type of this triangle according to its angles is ..... - angled triangle. a) obtuse b) right c) acute d) otherwise	
16	The sum of the measures of the exterior angle of the equilateral triangle = ... a) 60° b) 90° c) 30° d) 360°	
17	The sum of the measures of the exterior angle of the isosceles triangle = ... a) 60° b) 90° c) 30° d) 360°	
18	The sum of the measures of the exterior angle of the scalene triangle = ... a) 60° b) 90° c) 30° d) 360°	
19	The right-angled triangle has ..... acute angle. a) 1 b) 2 c) 0 d) 3	
20	The obtuse -angled triangle has ..... acute angle. a) 1 b) 2 c) 0 d) 3	

21	Any triangle has at least two .....interior angles. a) right b) obtuse c) acute d) reflex	
22	In Δ ABC , if D and E are the midpoints of AB and AC respectively , BC = 10 cm. , then DE = ... cm. · a) 5 b) 8 c) 4 d) 2	
23	In Δ ABC , if D and E are the midpoints of AB and AC respectively , BC = 16 cm. , then DE = ... cm. · a) 5 b) 8 c) 4 d) 2	
24	In Δ ABC , if D and E are the midpoints of AB and AC respectively , BC = 8 cm. , then DE = ... cm. · a) 5 b) 8 c) 4 d) 2	
25	If X and Y are the midpoints of AB and AC in A ABC and XY = 5 cm. , then BC = ... cm. a) 4 b) 6 c) 8 d) 10	
26	If X and Y are the midpoints of AB and AC in A ABC and XY = 4 cm. , then BC = ... cm. a) 4 b) 6 c) 8 d) 10	
27	In Δ ABC if: X , Z are the midpoints of AC and AB respectively , then XZ // ..... a) AB b) BC c) AC d) CY	
28	In Δ ABC if: Z , Y are the midpoints of AC and AB respectively , then ZY // ..... a) AB b) BC c) AC d) CY	
29	In Δ ABC if: m ($\angle$A) > m ($\angle$ B) + m ($\angle$ C) , then the angle A is ..... a) acute. b) right. c) obtuse. d) straight.	
30	In Δ ABC if: m ($\angle$ X) > m ($\angle$ B) + m ($\angle$ C) , then the angle X is ..... a) acute. b) right. c) obtuse. d) straight.	
31	In Δ ABC if: m ($\angle$ X) > m ($\angle$ B) + m ($\angle$ C) , then the angle B is ..... a) acute. b) right. c) obtuse. d) straight.	
32	In Δ ABC , m ($\angle$A) = m ($\angle$ B) + m ($\angle$ C) , then m ($\angle$A)= ..... a) 30° b) 90° c) 60° d) 150°	
33	In Δ ABC , m ($\angle$B) = m ($\angle$ A) + m ($\angle$ C) , then m ($\angle$ B)= ..... a) 30° b) 90° c) 60° d) 150°	
34	In Δ ABC , m ($\angle$A) = m ($\angle$ B) + m ($\angle$ C) , then m ($\angle$A) ..... 90° A) < B) > C) = D) $\geq$	

35 In Δ ABC if: m ($\angle$ B) = m ($\angle$ A) + m ($\angle$ C) , then the angle B is .....
a) acute. b) right. c) obtuse. d) straight.

36 In Δ ABC if: m ($\angle$ B) = m ($\angle$ A) + m ($\angle$ C) , then the angle A is .....
a) acute. b) right. c) obtuse. d) straight.

37 In Δ ABC if: m ($\angle$ B) = m ($\angle$ A) + m ($\angle$ C) , then the angle C is .....
a) acute. b) right. c) obtuse. d) straight.

38 In Δ ABC, if m ($\angle$ C) : m ($\angle$ A) : m ($\angle$ B)= 1 : 2 : 6 , then m ($\angle$ B) = ...
a) 30 b) 60 c) 90 d) 120

39 In Δ ABC, if m ($\angle$ C) : m ($\angle$ A) : m ($\angle$B)= 1 : 2 : 3 , then m ($\angle$ C) = ...
a) 30 b) 60 c) 90 d) 120

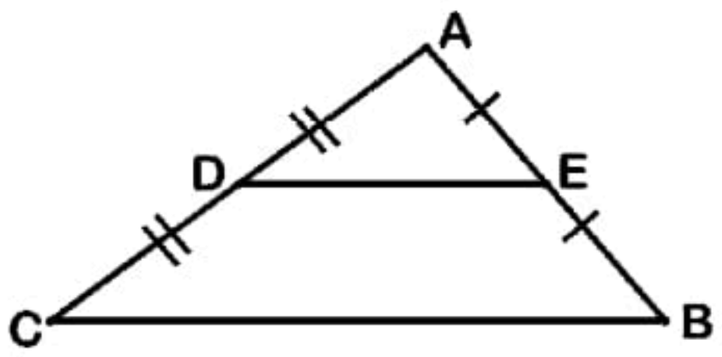
40 In Δ ABC, if m ($\angle$ C) : m ($\angle$ A) : m ($\angle$B)= 1 : 2 : 3 , then m ($\angle$ A) = ...
a) 30 b) 60 c) 90 d) 120

41 In Δ ABC, if m ($\angle$C) : m ($\angle$ A) : m ($\angle$B) = 1 : 3 : 5 , then $\angle$B is.....
a) an obtuse b) an acute c) a right d) otherwise1

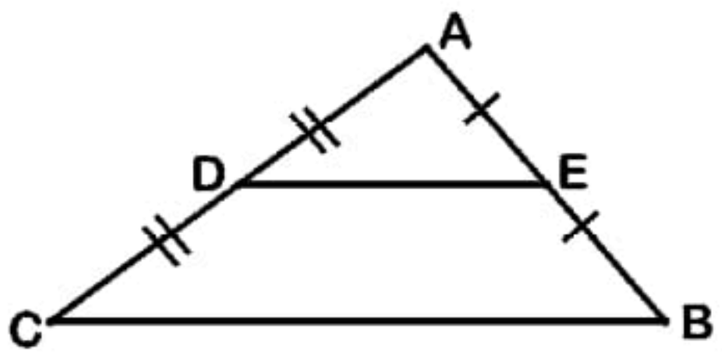
42 In Δ ABC, if m ($\angle$C) : m ($\angle$ A) : m ($\angle$B) = 1 : 3 : 5 , then $\angle$C is.....
a) an obtuse b) an acute c) a right d) otherwise1

43 In Δ ABC, if m ($\angle$C) : m ($\angle$ A) : m ($\angle$B) = 1 : 3 : 5 , then $\angle$A is.....
a) an obtuse b) an acute c) a right d) otherwise1

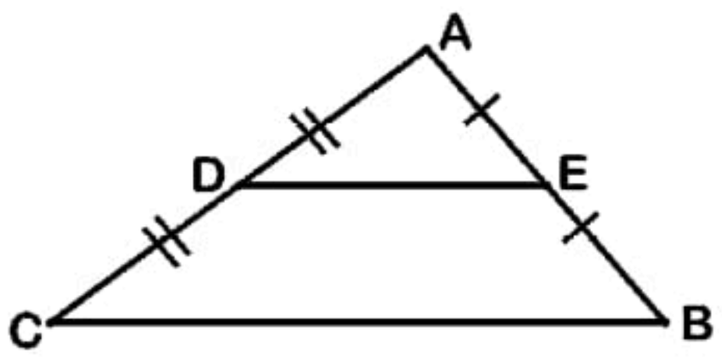
44 In the opposite figure : BC = 14 cm. ,
then DE = ... cm.
a) 5 b) 4
c) 6 d) 7



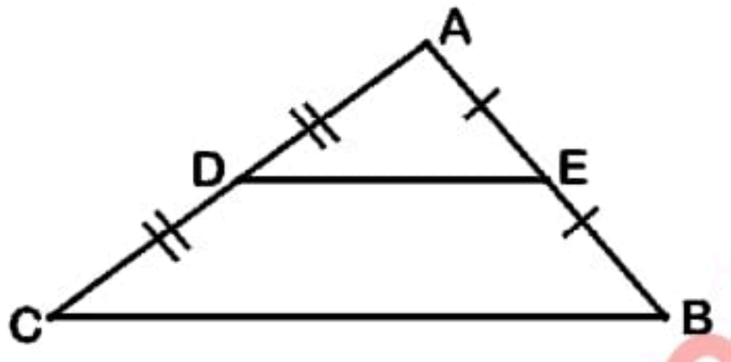
45 In the opposite figure : BC = 8 cm. ,
then DE = ... cm.
a) 5 b) 4
c) 6 d) 7



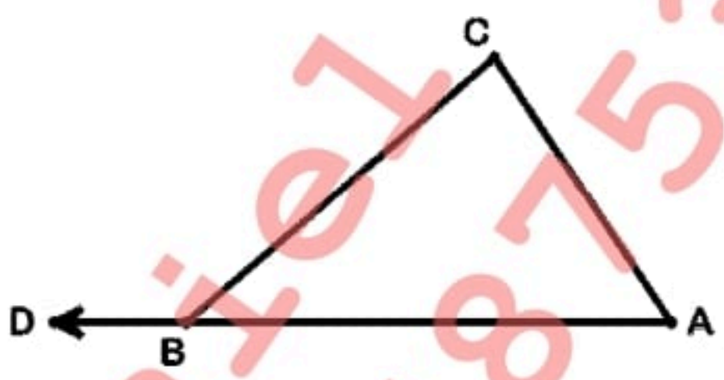
46 In the opposite figure : DE = 3 cm. ,
then BC = ... cm.
a) 6 b) 8
c) 10 d) 12



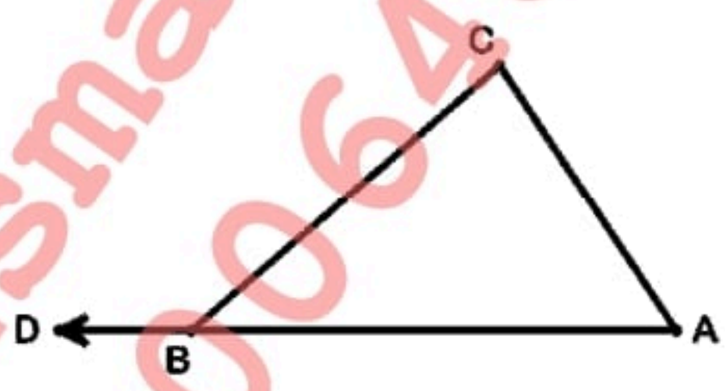
47 In the opposite figure : DE = 6 cm. ,
then BC = ... cm.
a) 6 b) 8
c) 10 d) 12



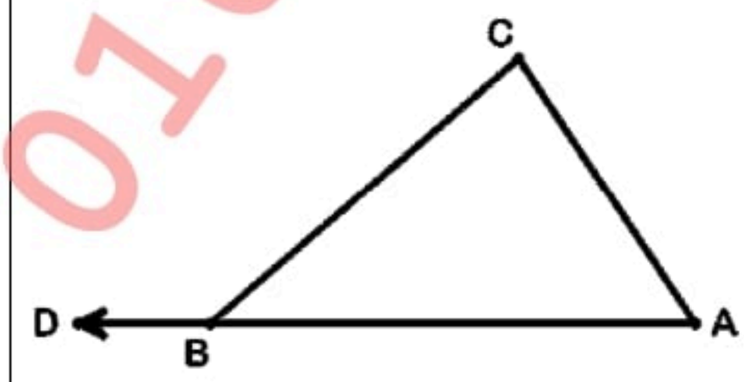
48 In the opposite figure: (∠CBD) = 110° ,
m (∠ A) = 60° , then m (∠ C) = ...°
a) 50 b) 40
c) 30 d) 20



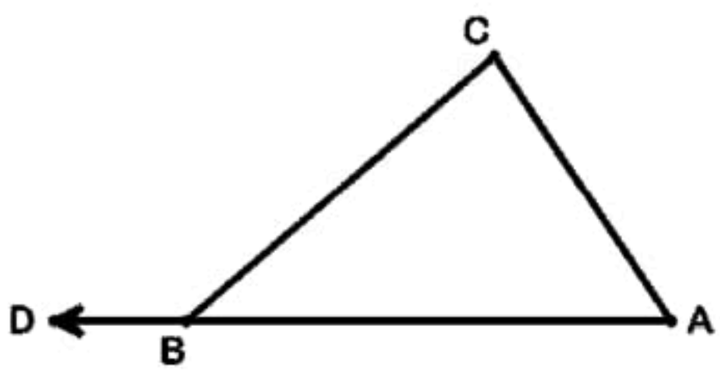
49 In the opposite figure: (∠CBD) = 80° ,
m (∠ A) = 60° , then m (∠ C) = ...°
a) 50 b) 40
c) 30 d) 20



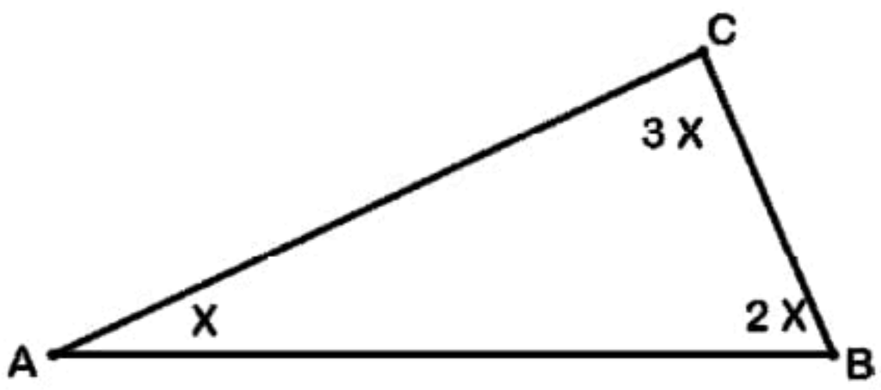
50 In the opposite figure: m (∠C) = 50° ,
m (∠ A) = 65° , then: m (∠CBD)= .....°
a) 100 b) 110
c) 115 d) 120



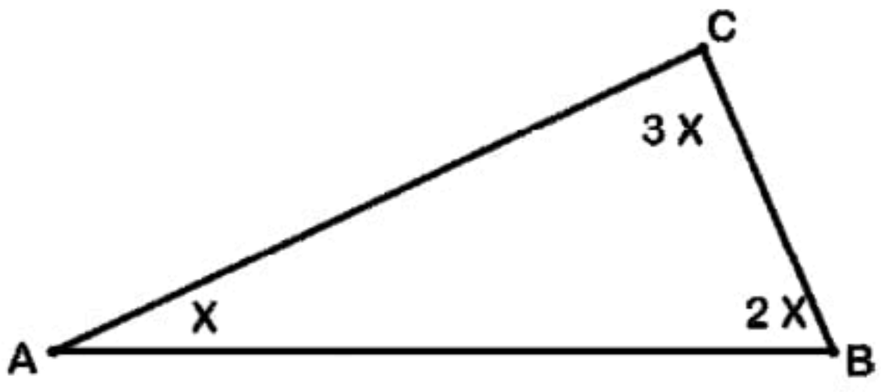
51 In the opposite figure: m (∠C) = 40° ,
m (∠ A) = 70° , then: m (∠CBD)= .....°
a) 100 b) 110
c) 115 d) 120



52 In the opposite figure:
m (∠C) = ...°
a) 30 b) 60
c) 90 d) 120



53 In the opposite figure:
m (∠B) = ...°
a) 30 b) 60
c) 90 d) 120



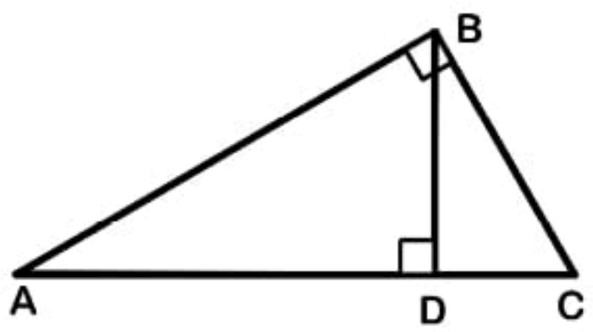
1	A
2	A
3	D
4	A
5	A
6	C
7	B
8	A
9	A
10	C
11	D
12	C
13	A
14	A
15	B
16	D
17	D
18	D
19	B

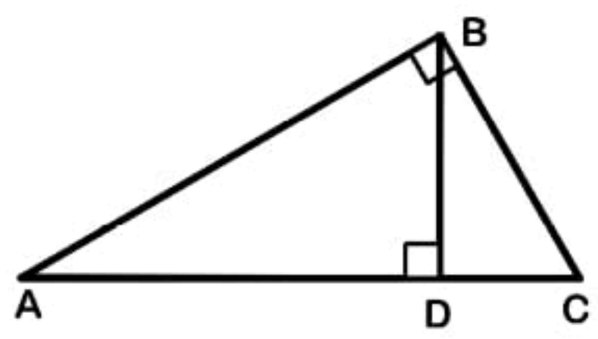
20	B
21	C
22	A
23	B
24	C
25	D
26	C
27	B
28	B
29	C
30	C
31	A
32	B
33	B
34	C
35	B
36	A
37	A
38	D
39	A

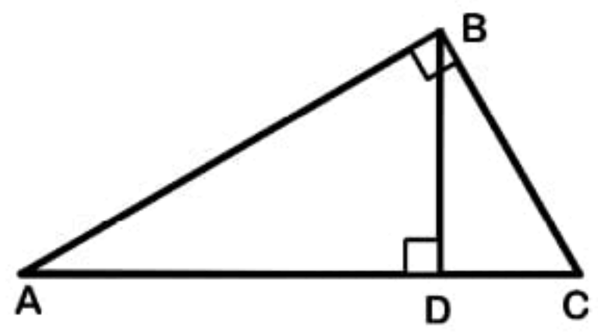
40	B
41	A
42	B
43	B
44	D
45	B
46	A
47	D
48	A
49	D
50	C
51	B
52	C
53	B

Exercises

[B] Choose the correct : -

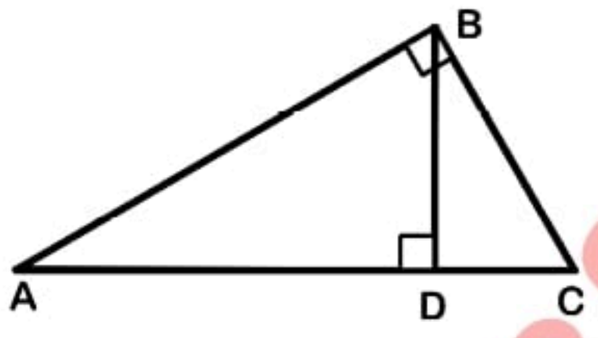
1	In Δ ABC if m ($\angle$A) = m ($\angle$ B) + m ($\angle$ C) , then m ($\angle$A) = ... a) 180° b) 45° c) 90° d) 120°	
2	In Δ ABC if m ($\angle$B) = m ($\angle$ A) + m ($\angle$ C) , then m ($\angle$B) = ... a) 180° b) 45° c) 90° d) 120°	
3	In Δ ABC if m ($\angle$C) = m ($\angle$ B) + m ($\angle$ A) , then m ($\angle$C) = ... a) 180° b) 45° c) 90° d) 120°	
4	In Δ ABC , if m ($\angle$A) + m ($\angle$ C) = m ($\angle$ B) , then m ($\angle$ B) = ... a) 180° b) 90° c) 45° d) 360°	
5	In Δ ABC , if m ($\angle$B) + m ($\angle$ C) = m ($\angle$ A) , then m ($\angle$ A) = ... a) 180° b) 90° c) 45° d) 360°	
6	In Δ ABC , if m ($\angle$A) + m ($\angle$ B) = m ($\angle$ C) , then m ($\angle$ C) = ... a) 180° b) 90° c) 45° d) 360°	
7	In Δ ABC , if m ($\angle$A) = m ($\angle$ B) + m ($\angle$ C) , then m ($\angle$ C) ..... 90° A) < B) > C) = D) $\geq$	
8	In the opposite figure the number of right –angled triangle is ..... a) 1 b) 2 c) 3 d) 4 	
9	In Δ ABC , if m ($\angle$A) = m ($\angle$ B) + m ($\angle$ C) , then m ($\angle$ B) ..... 90° A) < B) > C) = D) $\geq$	
10	In Δ ABC if: m ($\angle$ A) = m ($\angle$ B) + m ($\angle$ C) , then the angle B is ..... a) acute. b) right. c) obtuse. d) straight.	

11	Δ ABC in which m ($\angle$ B) = 90° , then $(AC)^2 = (BC)^2$ ..... $(AB)^2$ a) ÷ b) x c) – d) +	
12	Δ ABC in which m ($\angle$ A) = 90° , then $(AC)^2 = (BC)^2$ ..... $(AB)^2$ a) ÷ b) x c) – d) +	
13	Δ ABC in which m ($\angle$ C) = 90° , then $(AC)^2 = (AB)^2$ ..... $(BC)^2$ a) ÷ b) x c) – d) +	
14	If Δ ABC is right angled at B , then $(AC)^2$ = ... a) $(AB)^2 + (BC)^2$ b) $(AC)^2 + (BC)^2$ c) $(AB)^2 + (XY)^2$ d) $(AC)^2 - (BC)^2$	
15	If Δ ABC is right angled at A , then $(BC)^2$ = ... a) $(AB)^2 + (BC)^2$ b) $(AC)^2 + (AB)^2$ c) $(AC)^2 + (XY)^2$ d) $(AC)^2 - (BC)^2$	
16	If Δ ABC is right angled at C , then $(AB)^2$ = ... a) $(AB)^2 + (BC)^2$ b) $(AC)^2 + (BC)^2$ c) $(AB)^2 + (XY)^2$ d) $(AC)^2 - (BC)^2$	
17	In the opposite figure the number of right –angled triangle is ..... a) 1 b) 2 c) 3 d) 4 	
18	If Δ ABC is right angled at B , then $(AB)^2$ = ... a) $(AC)^2 - (AB)^2$ b) $(AC)^2 - (BC)^2$ c) $(BC)^2 - (AB)^2$ d) $(BC)^2 - (AC)^2$	
19	If Δ ABC is right angled at B , then $(BC)^2$ = ... a) $(AC)^2 - (AB)^2$ b) $(AC)^2 - (BC)^2$ c) $(BC)^2 - (AB)^2$ d) $(BC)^2 - (AC)^2$	
20	If Δ ABC is right angled at A , then $(AB)^2$ = ... a) $(AC)^2 - (AB)^2$ b) $(AC)^2 - (BC)^2$ c) $(BC)^2 - (AB)^2$ d) $(BC)^2 - (AC)^2$	
21	In Δ ABC if m ($\angle$ B) = 90° , AB = 3 cm. , BC = 4 cm. , then AC = ... cm. A) 5 B) 15 C) 20 D) 10	
22	In Δ ABC if m ($\angle$ B) = 90° , AB = 9 cm. , BC = 12 cm. , then AC = ... cm.	

	A) 5 B) 15 C) 20 D) 10	
23	In Δ ABC if m ($\angle$ B) = 90° , AB = 12 cm. , BC = 16 cm. , then AC = ... cm. A) 5 B) 15 C) 20 D) 10	
24	In Δ ABC if m ($\angle$ B) = 90° , AB = 21 cm. , BC = 28 cm. , then AC = ... cm. A) 25 B) 30 C) 35 D) 40	
25	In Δ ABC if m ($\angle$ B) = 90° , AB = 18 cm. , BC = 24 cm. , then AC = ... cm. A) 25 B) 30 C) 35 D) 40	
26	In Δ ABC if m ($\angle$ B) = 90° , AB = 24 cm. , BC = 10 cm. , then AC = ... cm. A) 13 B) 26 C) 39 D) 52	
27	In Δ ABC, if m ($\angle$B)= 90° , AC = 10 cm. and BC = 8 cm. , then AB = ...cm. A) 36 B) $\sqrt{164}$ C) 6 D) 8	
28	In the opposite figure the number of right –angled triangle is ..... a) 1 b) 2 c) 3 d) 4 	
29	In Δ ABC, if m ($\angle$B) = 90° , AB = 5 cm. ,AC = 13 cm., then BC = ... cm. a) 8 b) 10 c) 12 d) 18	
30	In Δ ABC ,if m ($\angle$A) = 90° ,BC = 25 cm. and AC = 20 cm. ,then AB =.....cm. a) 20 b) 25 c) 10 d) 15	
31	In Δ ABC, if m ($\angle$B)= 90° , AC = 5 cm. and BC = 3 cm. , then AB = ...cm. A) 3 B) 4 C) 5 D) 10	
32	In Δ ABC, if m ($\angle$B)= 90° , AC = 5 cm. and BC = 4 cm. , then AB = ...cm. A) 3 B) 4 C) 5 D) 10	

33 In the opposite figure the number of right –angled triangle is .....

a) 1 b) 2 c) 3 d) 4



34 In Δ ABC, if m ($\angle$B)= 90° , AC = 13 cm. and BC = 12 cm. , then AB = ...cm.

A) 3 B) 4 C) 5 D) 10

35 If ABCD is a square , then $(AC)^2$ = ...

a) AB b) $(AB)^2$ c) $2(AB)^2$ d) $4(AB)^2$

36 If ABCD is a square , then $(BD)^2$ = ...

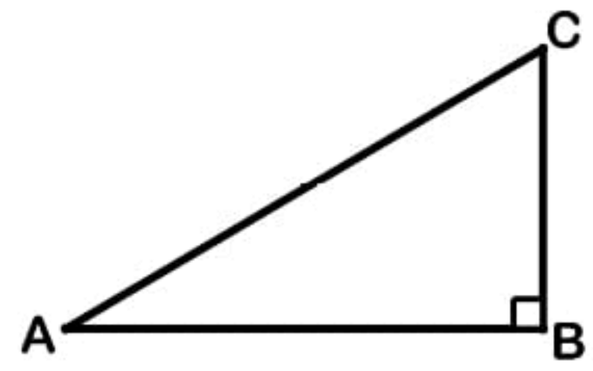
a) AB b) $(AB)^2$ c) $2(AB)^2$ d) $4(AB)^2$

37 If ABCD is a square , then $(AC)^2$ = ...

a) BC b) $(BC)^2$ c) $2(BC)^2$ d) $4(BC)^2$

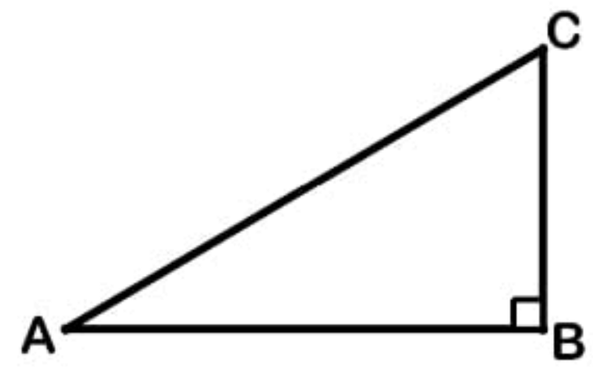
38 In the opposite figure: AB = 9 cm. , BC = 12 cm.,
AC = ... cm.

a) 5 b) 10 c) 15 d) 20



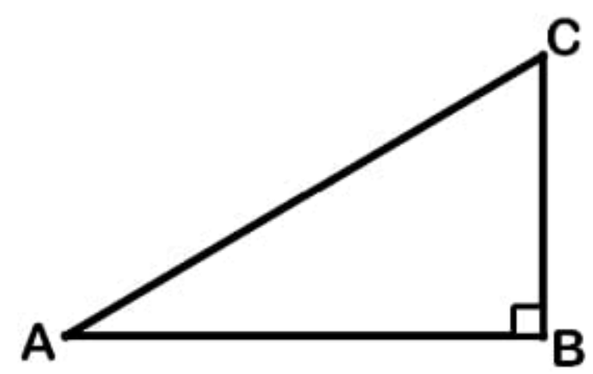
39 In the opposite figure: AB = 6 cm. , BC = 8 cm.,
AC = ... cm.

a) 5 b) 10 c) 15 d) 20



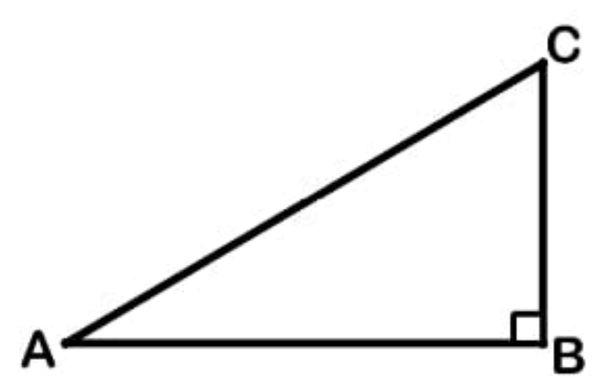
40 In the opposite figure: AB = 3 cm. , BC = 4 cm.,
AC = ... cm.

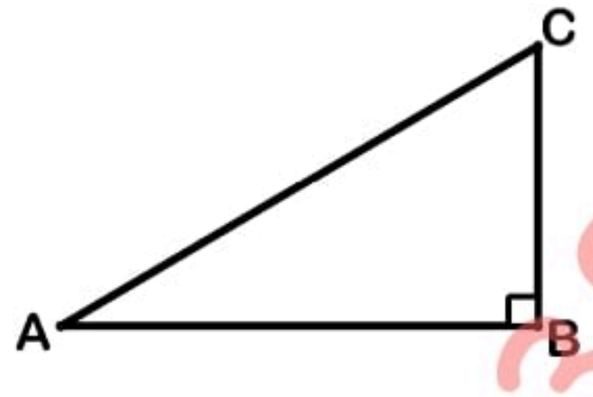
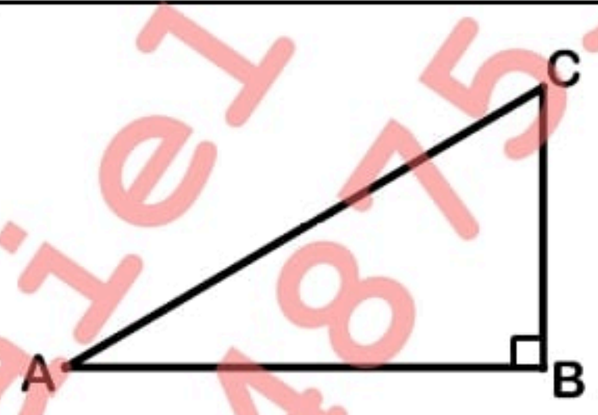
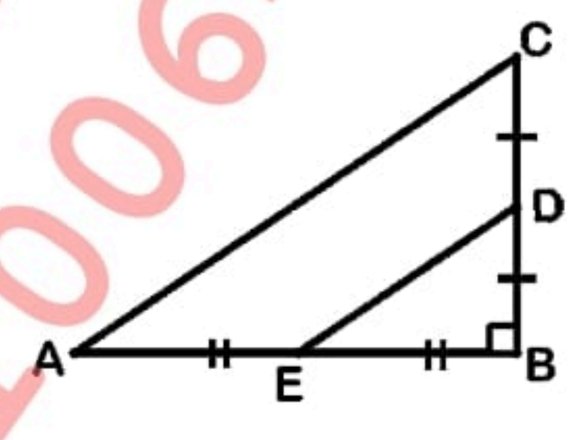
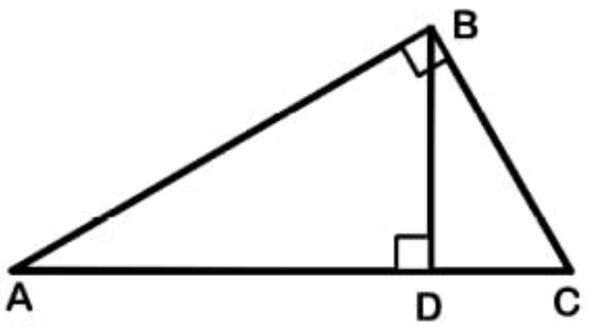
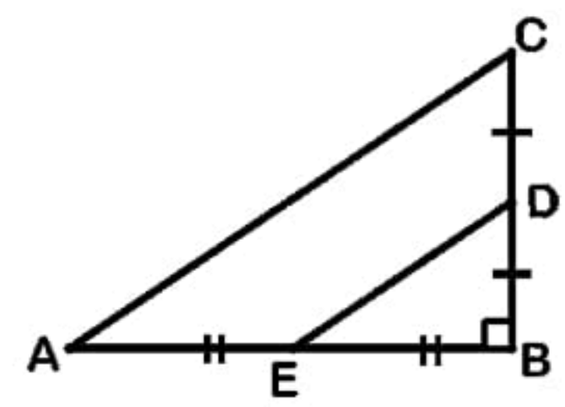
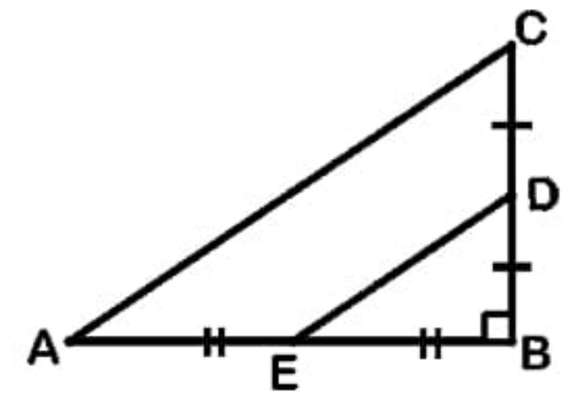
a) 5 b) 10 c) 15 d) 20



41 In the opposite figure: AC = 5 cm. , BC = 4 cm.,
AB = ... cm.

a) 3 b) 4 c) 6 d) 8



42	In the opposite figure: AC = 5 cm. , BC = 3 cm., AB = ... cm. a) 3 b) 4 c) 6 d) 8		
43	In the opposite figure: AC = 10 cm. , BC = 8 cm., AB = ... cm. a) 3 b) 4 c) 6 d) 8		
44	In the opposite figure: BC = 6 cm. , AB = 8 cm., ED = ... cm. a) 5 b) 7.5 c) 10 d) 12.5		
45	In the opposite figure the number of right –angled triangle is ..... a) 1 b) 2 c) 3 d) 4		
46	In the opposite figure: BC = 9 cm. , AB = 12 cm., ED = ... cm. a) 5 b) 7.5 c) 10 d) 12.5		
47	In the opposite figure: BC = 15 cm. , AB = 20 cm., ED = ... cm. a) 5 b) 7.5 c) 10 d) 12.5		

1	C
2	C
3	C
4	B
5	B
6	B
7	A
8	C
9	A
10	A
11	D
12	C
13	C
14	A
15	B
16	B

17	C
18	B
19	A
20	D
21	A
22	B
23	C
24	C
25	B
26	B
27	C
28	C
29	C
30	D
31	B
32	A

33	C
34	C
35	C
36	C
37	C
38	C
39	B
40	A
41	A
42	B
43	C
44	A
45	C
46	B
47	D

Choose the Correct Answer:

1. $\sqrt{(-8)^2 + (-6)^2}$ = ...

(a) $|-10|$ (b) ± 10 (c) 14 (d) -14

2. Which of the following is the greatest ?

(a) 2.3×10^4 (b) 2.3×10^5 (c) 3.2×10^4 (d) 3.2×10^5

3. The side length of a square whose area $9x^2$ cm^2 is ..... cm. where $x > 0$

(a) $3x$ (b) $3x^2$ (c) $9x$ (d) $9x^2$

4. If $-x > 4$, then .....

(a) $x > -4$ (b) $x > 4$ (c) $x < -4$ (d) $x < 4$

5. $2 \times 6 - 4 \times 2$ = ...

(a) 4 (b) 8 (c) 10 (d) 2

6. $\sqrt{9 + 16}$ = ...

(a) 7 (b) 5 (c) 25 (d) -7

7. The multiplicative inverse of $\sqrt{\frac{100}{25}}$ is .....

(a) $\pm \frac{10}{5}$ (b) $\pm \frac{5}{10}$ (c) $\frac{10}{5}$ (d) $\frac{5}{10}$

8. The age of Amr now is x years , then his age 5 years ago is .....

(a) $5x$ (b) $x - 5$ (c) $5 - x$ (d) $x + 5$

9. If $4x = 20$, then $3x - 1$ = ...

(a) 14 (b) 15 (c) 16 (d) 17

10. The S.S. of the inequality $x < 0$ in $\mathbb{N}$ is .....

(a) $\{0\}$ (b) $\{1\}$ (c) $\{0 , 1\}$ (d) $\varnothing$

11. $\sqrt{x^8}$ = ...

(a) x^8 (b) x^5 (c) x^6 (d) x^4

12. $\sqrt{\frac{25}{49}}$ = ...

(a) $\frac{5}{7}$ (b) $\frac{-5}{7}$ (c) $\pm \frac{5}{7}$ (d) $\frac{7}{5}$

13. $3 \times 6 - 4 \div 2$ = ...

(a) 3 (b) 7 (c) 16 (d) 20

14. If $5x = 15$, then $2^x =$ .....

(a) 2 (b) 8 (c) 3 (d) 9

15. If $x + 9 = 11$, then $7x =$ .....

(a) 2 (b) 9 (c) 11 (d) 14

16. $9 + 4 \times 3^2 =$ .....

(a) 45 (b) 117 (c) 24 (d) 33

Complete:

17. If $7 - 2x = 3$, then $x =$ ...2... where $x \in \mathbb{Q}$

18. If $3x + 1 \geq 10$, then $x \geq$ ...3... where $x \in \mathbb{Q}$

19. The standard form of the number $0.7 \times 0.005 =$ ...3.5×10^{-3}...

20. $\left(-\frac{3}{7}\right)^0 \times \left(\frac{-2}{5}\right)^2 \times \sqrt{6\frac{1}{4}} = \frac{2}{5}$

21. If $x + 2 = 6$, then $x =$ ...4...

22. $7(6^2 - 5 \times 6) =$ ...42...

23. 0.75×10^8 in the standard form is ...7.5... $\times$ ...10^7...

24. If $3x + 1 = 16$, then the value of $4x =$ ...20...

25. $\sqrt{9 + 16} = 3 +$ ...2...

26. If $2x = 5$, then $6x - 5 =$ ...10...

27. The solution set of the inequality : $-x > -1$ in $\mathbb{N}$ is ...{0}...

28. If $2x = \sqrt{36}$, then $3x - 4 =$ ...5...

29. $\left(\frac{-3}{2}\right)^2 \times \sqrt{\frac{64}{9}} \times \left(\frac{2}{7}\right)^0 = 6$

30. If $2x + 7 = 3$, then $x =$ ...-2...

31. The standard form of $0.000057 =$ ...5.7×10^{-5}...

32. $\sqrt{(-8)^2 + 6^2} =$ ...10...

33. The multiplicative inverse of the number $-\sqrt{\frac{9}{16}} =$ ...$-\frac{4}{3}$...

34. If $x + 5 = 1$, then the S.S. in $\mathbb{N}$ is ...$\emptyset$...

Choose the Correct Answer:

35. The image of the point (– 1 , 3) by translation (4 , – 2) is .....

(a) (3 , 1) (b) (3 , – 1) (c) (5 , 1) (d) (5 , – 5)

36. The image of the point (2 , – 5) by reflection in X-axis is .....

(a) (2 , – 5) (b) (2 , 5) (c) (– 2 , – 5) (d) (5 , 2)

37. The image of the point (3 , – 2) by reflection in the y-axis is the point .....

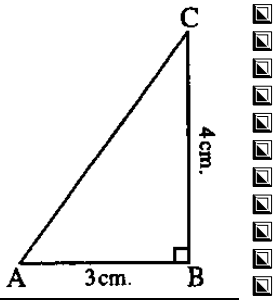
(a) (3 , 2) (b) (– 3 , – 2) (c) (– 3 , 2) (d) (– 2 , 3)

38. **In the opposite figure :**

AC = ... cm.

(a) 5 (b) 7

(c) 25 (d) 625

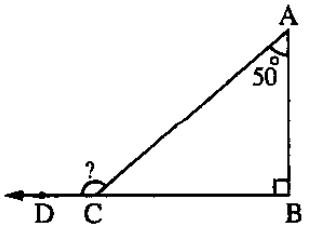


39. **In the opposite figure :**

m (∠ ACD) = ...°

(a) 40 (b) 140

(c) 90 (d) 50



40. The reflected image of the point A (– 3 , 2) in the origin point is the point

Ȧ (..... , ...)

(a) (3 , – 2) (b) (3 , 2) (c) (– 3 , – 2) (d) (2 , – 3)

41. The reflection in the X-axis maps the point B (X , y) to the point

Ḃ (..... , ...)

(a) (X , y) (b) (X , – y) (c) (– X , – y) (d) (– X , y)

42. The image of the point (– 1 , 3) under the translation (4 , – 2) is the point

(..... , ...)

(a) (5 , – 5) (b) (5 , 1) (c) (3 , 1) (d) (3 , – 1)

43. The image of the point (– 4 , 5) by translation (2 , – 3) is .....

(a) (2 , 2) (b) (– 2 , 2) (c) (2 , – 2) (d) (– 2 , – 2)

44. If ABC is right-angled triangle at B , AB = 20 cm. , AC = 25 cm. , then the length of BC = ... cm.

(a) 5 (b) 45 (c) 225 (d) 15

45. The line segment joining the midpoints of two sides of a triangle is ..... the third side.
(a) bisect to (b) perpendicular (c) equal to (d) parallel to

46. The image of a rhombus by any translation is a .....
(a) rhombus. (b) rectangle. (c) square. (d) trapezium.

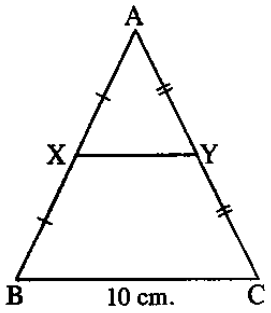
47. ABC is a triangle in which m (∠ A) = 90° , then $(AC)^2 = (BC)^2$ ..... $(AB)^2$
(a) + (b) – (c) × (d) ÷

48. The image of the point (– 1 , 3) by reflection in y-axis is .....
(a) (1 , 3) (b) (3 , – 1) (c) (– 1 , – 3) (d) (1 , – 3)

49. Any triangle has at least two ..... interior angles.
(a) right (b) obtuse (c) acute (d) reflex

50. In Δ ABC if m (∠ B) = 90° , AB = 6 cm. , BC = 8 cm. , then AC = ... cm.
(a) 100 (b) 8 (c) 6 (d) 10

51. **In the opposite figure :**
X , Y are midpoints of $\overline{AB}$, $\overline{AC}$ respectively , BC = 10 cm.
, then XY = ... cm.
(a) 5 (b) 20
(c) 10 (d) 30

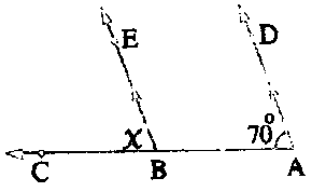


Complete:

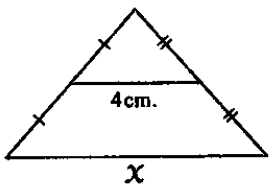
52. The image of the point (5 , 3) by translation : (x , y) ⟶ (x + 3 , y – 1) is ..... (8, 2)

53. The length of the line segment that joins two midpoints of two sides of a triangle equals ..... the length of the third side.

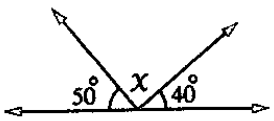
54. **In the opposite figure :**
x = ... °



55. **Find the value of x :**



x = ... cm.



x = ... °

56. In the rectangle ABCD , $(AB)^2 + (AD)^2$ = ...

Choose the correct answer

1	$\sqrt{1\frac{9}{16}}$ = ... ($1\frac{3}{4}$, $-1\frac{3}{4}$, $1\frac{1}{4}$, $-1\frac{1}{4}$)
2	3.04×10^7 = ... (340000 , 3040000 , 3400000 , 30400000)
3	$\frac{x}{2} < 5$, *equivalent* ..... ($x < \frac{5}{2}$, $x > \frac{5}{2}$, $x < 10$, $x > 10$)
4	If $x + 4 = 10$, then $5x$ = ... (30 , 20 , 12.5 , 25)
5	$6 \times 2 - 4 \div 2$ = ... (1 , 2 , 10 , 12)
6	0.7×0.005 = ... (3.5×10^3 , 3.5×10^{-2} , 3.5×10^2 , 3.5×10^{-3})
7	*if* $x^2 = 25$, *then* x = ... (5 , -5 , ± 5 , 25)
8	$\sqrt{(-8)^2 + (-6)^2}$ = ... ($\lvert -10 \rvert$, 14 , ± 10 , -14)
9	2.37×10^{-4} = ... (0.00237 , 0.000237 , 23700 , 0.0000237)
10	*The multiplicative inverse of the number* $\sqrt{\frac{4}{9}}$ = ... ($\frac{-3}{2}$, $\frac{2}{3}$, $-\frac{2}{3}$, $\frac{3}{2}$)
11	If $x = \sqrt{\frac{1}{4}}$, then x^3 = ... ($\frac{3}{8}$, $\frac{1}{8}$, $\frac{1}{16}$, $\frac{1}{64}$)
12	The $S.S$ of the equation $5 - x = 3$ in Q is ..... ({2} , {−2} , {7} , ∅)
13	*The side length of the square whose area is* $16\,x^2\ cm^2$ = ... cm ($8x$, $4x$, $2x$, $8x^2$)
14	*if* $\frac{x}{2} = \frac{8}{x}$, then x = ... (4 , -4 , ± 4 , 16)
15	*Which of the following is the greatest ?* (2.3×10^4 , 2.3×10^5 , 3.2×10^4 , 3.2×10^5)
16	$\sqrt{(a+b)^3\,(a+b)}$ = ... ($(a+b)^2$, $a^4 + b^4$, $-(a+b)^2$, $\pm(a+b)^2$)
17	*If* $0.00079 = 7.9\,a$, *then* a = ... (10^3 , 10^{-3} , 10^{-4} , 10^4)
18	$\sqrt{\sqrt{81}}$ = ... (81 , 27 , 9 , 3)

19	$\sqrt{100-64} = 10 - \ldots\ldots\ldots$	(4 , 8 , 6 , 36)
20	*the S.S of the inequality* : $x < 2$ *in* N *is*	({0} , {1} , {0 , 1} , ∅)
21	If $2a = \sqrt{9}\ b$, then $\frac{a}{b} = \ldots\ldots$	($\frac{3}{2}$, $-\frac{2}{3}$, $-\frac{3}{2}$, $\frac{2}{3}$)
22	*if* $x > y$, then $x + z$ ..... $y + z$	(< , > , = , ≤)
23	*if zero* $\in \{5 , x - 3\}$, then x = ...	(*zero* , -5 , 3 , -3)
24	*Half milliard* $= 5 \times 10^{\ldots\ldots}$	(6 , -9 , 8 , 9)
25	If $5x = 35$, then $2x + 1$ = ...	(7 , 8 , 15 , 7)
26	$\sqrt{\left(\frac{-81}{100}\right)^2} = \ldots\ldots\ldots$	($\frac{9}{10}$, $-\frac{81}{100}$, $\pm\frac{81}{100}$, $\frac{81}{100}$)
27	if $\frac{6x}{5} = -2$, *then* $x^2 = \ldots\ldots\ldots$	($\frac{-25}{9}$, $\frac{5}{9}$, $\frac{25}{9}$, $\frac{25}{3}$)
28	*The square roots of* 36 = ...	(6 , ± 6 , -6 , 18)
29	$\pm\sqrt{\frac{4}{9}} = \ldots\ldots\ldots$	($\frac{-4}{9}$, $\frac{-2}{3}$, $\pm\frac{2}{3}$, $\frac{2}{3}$)
30	*the age of ahmed now is* x *years , then his age* 5 *years ago is*	($5x$, $x - 5$, $5 - x$, $x + 5$)
31	$3^2 \times 6 \div 3 + (2^4 - 6) = \ldots\ldots$	(18 , 28 , 42 , 32)
32	$\sqrt{64 + 36} = 8 + \ldots\ldots$	(2 , 6 , 10 , -2)
33	*if* $-x < 3$, *then*	($x > 3$, $x > -3$, $x < 3$, $x < -3$)
34	*If* $0.0035 = 3.5 \times 10^n$, *then* n = ...	(2 , -3 , -2 , 3)
35	*if* $\sqrt{\frac{a}{b}} = \frac{2}{3}$, then $\frac{b}{a} = \ldots\ldots$	($\frac{2}{3}$, $\frac{3}{2}$, $\frac{4}{9}$, $\frac{9}{4}$)
36	*three times a number is* 48 , *then* $\frac{1}{4}$ *the number is*	(16 , 4 , 12 , 8)
36	$\sqrt{a} + 4 = 6$, *then the value of* a *is*	(2 , 16 , 32 , 4)
37	*if* $x > y$ and $z > 0$, then xz ..... yz	(< , > , = , ≤)

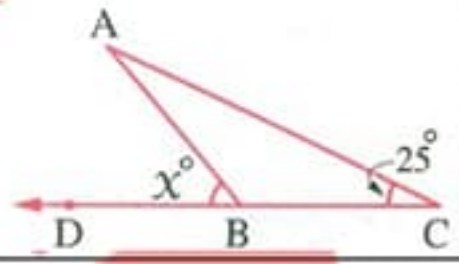
38	*which of the following is the smallest number ?*	$(314\times10^3\ ,\ 3.14\times10^4\ ,\ 31.4\times10^5\ ,\ 0.314\times10^8)$
39	*the additive inverse of* $\sqrt{\left(\frac{-2}{5}\right)^2}$ *is*	$(\frac{4}{25}\ ,\ \frac{-4}{25}\ ,\ \frac{2}{5}\ ,\ \frac{-2}{5})$
40	$\sqrt{x^8}$ = ...	$(x^8\ ,\ x^5\ ,\ x^6\ ,\ x^4)$
41	*if* $3x+1=25$ *, then* x = ...	$(7\ ,\ 8\ ,\ 5\ ,\ 4)$
42	*if* $0.0035=3.5\times10^n$ *, then* n = ...	$(2\ ,\ -3\ ,\ -2\ ,\ 3)$
43	*the age of Ali now is x years , then his age after 5 years is*	$(x-5\ ,\ x+5\ ,\ 5-x\ ,\ 2x+5)$
44	*if* $-2x>6$ *, then* x ..... -3	$(<\ ,\ =\ ,\ >\ ,\ \leq)$
45	*if age of Fatma now is* $(x-2)$ *years , then his age 4 years ago is*	$(x-4\ ,\ x+4\ ,\ x+2\ ,\ x-6)$
46	$\sqrt{9}+\sqrt{4}=\sqrt{\ldots\ldots}$	$(13\ ,\ 5\ ,\ 25\ ,\ \sqrt{13})$
47	*if* $a-3<0$ *, then* a 3	$(<\ ,=\ ,>\ ,\geq)$
48	*the S.S of the inequality* $x<0$ *in N is*	$(\{0\}\ ,\ \{1\}\ ,\ \{0\ ,1\}\ ,\ \emptyset)$
49	*if* $2ab=10$ *, then* $3ab$ = ...	$(5\ ,\ 6\ ,\ 15\ ,\ 30)$
50	*the number which in the standard form between the following numbers is*	$(11\times10^8\ ,\ 9.7\times10^{-5}\ ,\ 10.3\times10^{-3}\ ,\ 0.87\times10^8)$
51	*if* $x>y$, then $\frac{1}{x}$ ..... $\frac{1}{y}$, where $x\neq0\ ,\ y\neq0$	$(>\ ,<\ ,=\ ,\geq)$
52	*which of the following* $=\frac{1}{4}$ *million ?*	$(25\times10^5\ ,\ 0.25\times10^5\ ,\ 0.25\times10^6\ ,\ 0.25\times10^7)$
53	*if* $x+9=-11$ *, then* x = ...	$(2\ ,\ -2\ ,\ 20\ ,\ -20)$
54	If $x\in Z$, then the $S.S$ of the inequality $20<5x<25$ is	$(\{4\}\ ,\ \{5\}\ ,\ \{4\ ,5\}\ ,\ \emptyset)$
55	*if* $3x=6$ *, then* $6x$ = ...	$(2\ ,\ 6\ ,\ 12\ ,\ 18)$
56	*if* $x=0.0009$ *then* $\sqrt{x}$ = ...	$(0.0003\ ,\ 0.0081\ ,\ 0.003\ ,\ 0.03)$

57	if $-x \geq -1$, then	($x \leq -1$, $x \geq 1$, $x \leq 1$, $x \geq -1$)
58	The $S.S$ of the equation : $3x = -9$ in N is	($\{-3\}$, $\{-6\}$, zero , $\emptyset$)
59	$\sqrt{\frac{16\,a^4b^2}{9}}$ = ...	($\frac{4a^2}{3}$, $\frac{4a^2b}{3}$, $\frac{4a^2b}{9}$, $\frac{8a^2b}{3}$)
60	if two numbers , one of them is twice the other and their sum is 21 , then the smallest number is	(3 , 5 , 7 , 9)
61	the $S.S$ of the inequality : $-2x <$ zero in Q is	(Q , Q_+ , Q_- , Z_+)
62	if $5x = 40$, then $\sqrt{x+1}$ = ...	(8 , 9 , 3 , -3)
63	The $S.S$ of the inequality : $-x \geq 1$ in N is	($\{0\}$, $\{0,1\}$, $\{1\}$, $\emptyset$)
64	the $S.S$ of the inequality $3x + 2 < 4$ in N is	($\{0\}$, $\emptyset$, $\{\frac{2}{3}\}$, $\{0, \frac{2}{3}\}$)
65	if $x > y$ and $z < 0$, then xz ..... yz	($<$, $>$, = , $\leq$)
66	if $\sqrt{x+3}$ = 3 , then x = ...	
67	The $S.S$ of the inequality $5 \leq x \leq 6$ in N is	
68	the $S.S$ of $-1 \leq -x < 3$, in N is	
69	Half million = ... (standard form)	
70	The $S.S$ of the inequality $-x > -1$ in N is	
71	two integers the smaller one is $2x$ and the greater is $5x$, if the difference between them is 30 , find the two numbers	
72	What is the number which if we add it to its three times the result is 28 ?	
73	The length of a rectangle exceeds its width by 4 m. and its perimeter is 68 m. Find the dimensions of the rectangle	
74	The sum of three consecutive even numbers is 12 , find these numbers	

Choose the correct answer

1	the image of the point $(-1,3)$ by translation $(4,-2)$ is ..... $((3,1),(3,-1),(5,1),(5,-5))$
2	the measure of the exterior angle of the equilateral triangle is ..... $(30^\circ, 45^\circ, 60^\circ, 120^\circ)$
3	A rectangle whose length = 4 cm. and width = 3 cm , then the length of its diagonal = ... cm. $(3, 4, 5, 25)$
4	the right angled triangle has ..... right angle $(1, 2, 0, 3)$
5	if ΔABC is right angled at B , $AB = 6$ cm , $BC = 8$ cm , then the length of AC = ... cm $(14, 2, 10, 6)$
6	any triangle has at least two ..... interior angles (right , obtuse , acute , reflex)
7	the image of the point $(2,-5)$ by reflection in x axis is ..... $((-2,-5),(2,-5),(2,5),(5,2))$
8	the image of the point $(-10,0)$ by reflection in the x axis is ..... $((10,0),(-10,0),(0,-10),(0,10))$
9	if ABC is right angled at B , $BC = 8$ cm , $AC = 10$ cm , then the length of AB = ... cm $(36, 6, 8, \sqrt{164})$
10	the length of line segment joining between two midpoints of two sides of triangle = ... the length of its third side $(\frac{1}{2}, \frac{2}{3}, \frac{1}{4}, \frac{1}{5})$
11	the reflected image of the point $A(-3,2)$ in the origin point is the point $A`(\ldots\ldots,\ldots\ldots)$ $((3,-2),(3,2),(-3,-2),(2,-3))$
12	the image of a rhombus by any translation is a ..... (rhombus , rectangle , square , trapezium)
13	in ΔABC : if $m(\angle A) + m(\angle B) = 110^\circ$, then $m(\angle C)$ = ...$^\circ$ $(110, 90, 70, 55)$

14	in ΔABC , if $m(\angle B) = \frac{1}{2}\, m(\angle A) = 30^\circ$, then the triangle will be ..... triangle (acute angled , right angled , equilateral , isosceles)
15	in ΔABC , if D and E are the midpoints of $\overline{AB}$ and $\overline{AC}$ respectively and $BC = 8\ cm$, then $DE =$ ..... Cm (16 , 12 , 4 , 2)
16	the measure of the exterior angle of a triangle is ..... the measure of any interior angle of the triangle except its adjacent angle ($>$, $<$, $=$, $\leq$)
17	in ΔABC : if $m(\angle B) = m(\angle A) + m(\angle C)$, then $\angle B$ is ..... (right , obtuse , acute , straight)
18	the image of the point $(2, -7)$ by reflection in the origin point ..... ($(2,7)$, $(-2,7)$, $(-2,-7)$, $(2,-7)$)
19	in the triangle ABC , if $m(\angle A) = m(\angle B) = 50^\circ$, then $m(\angle C) =$ ..... (130° , 100° , 80° , 50°)
20	the image of the point $(1, -2)$ by translation 4 units in positive direction of y axis is ..... ($(5,-2)$, $(1,2)$, $(5,2)$, $(1,4)$)
21	if $A`(4, -5)$ is the image of A by translation $(x, y) \rightarrow (x-2, y+1)$ then the point $A =$ ..... ($(6,-4)$, $(4,-4)$, $(2,-4)$, $(6,-6)$)
22	the image of the point $(3, 2)$ by reflection in y axis is ..... ($(3,2)$, $(-3,-2)$, $(-3,2)$, $(-2,3)$)
23	in ΔABC : if $m(\angle A) > m(\angle B) + m(\angle C)$, then the angle A is ..... (right , obtuse , acute , straight)
24	the point whose image by reflection in the origin point is itself is ..... ($(1,0)$, $(0,1)$, $(0,0)$, $(-1,0)$)
25	if $A`$ is the image of A by reflection in M and $MA = 6\ cm$ , then $AA` =$ ..... cm (6 , 3 , 12 , 9)

26	the image of the point $(3,-2)$ by reflection in the origin point followed by reflection in x axis is ..... ($(3,-2)$, $(-3,-2)$, $(-3,2)$, $(3,2)$)
27	if $m(\angle A) = m(\angle C)$, then x = ... (a) 50° (b) 130° (C) 25° (d) 180° 
28	ΔABC in which $m(\angle A) = 90^\circ$, then $(AC)^2 = (BC)^2$ ..... $(AB)^2$ (+ , × , − , ÷)
29	in ΔABC : if $m(\angle B) > m(\angle A) + m(\angle C)$, then $\angle A$ is ..... (right , obtuse , acute , straight)
30	if ABCD is a square , then $(AC)^2$ = ... (AB , $(AB)^2$, $2(AB)^2$, $4(AB)^2$)
31	the image of the point $(-5,0)$ by reflection in the ..... is itself (x axis , y axis , origin point , otherwise)
32	ΔABC is right angled at B , if the measure of the exterior angle at A is 120° , then $m(\angle C)$ = ... (30° , 90° , 60° , 120°)
33	the image of the point $(5,-3)$ by translation 3 units in negative direction of x axis is ..... ($(-3,5)$, $(-2,-3)$, $(2,-3)$, $(5,-6)$)
34	if ΔABC is right angled at B , then $(AB)^2$ = ... (a) $(AC)^2 + (BC)^2$ (b) $(AC)^2 - (BC)^2$ (C) $(BC)^2 - (AC)^2$ (d) $(AC) - (BC)$
35	if A`$(-4,5)$ is the image of A by translation $(-2,3)$, then the point A is ..... ($(-6,8)$, $(-2,8)$, $(-2,2)$, $(-6,2)$)
36	the image of the point ..... is itself by reflection in y axis ($(-3,3)$, $(3,3)$, $(0,3)$, $(3,0)$)
37	in ΔABC , if $m(\angle A) = m(\angle C) - m(\angle B)$, then $m(\angle B) = 50^\circ$, then $m(\angle A)$ = ... (40° , 90° , 45° , 50°)

38 *the line segment joining two midpoints of two sides of a triangle is .....the third side*

(*intersecting , parallel to , perpendicular , congruent*)

39 *the number of axis of symmetry of a rectangle is .....*

(1 , 2 , 3 , 4)

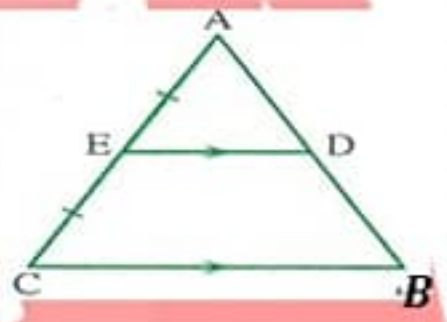
40 *image of the point* $(-1,4)$ *by the translation* $(x,y) \rightarrow (x+3, y-2)$ *followed by reflection in the x axis is .....*

($(2,2)$, $(-2,2)$, $(-2,-2)$, $(2,-2)$)

41 *in the opposite figure* : $CB : ED =$ .....

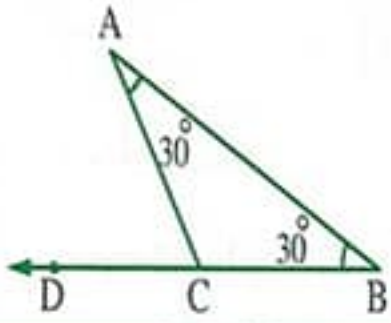
(*a*) 1 : 1 (*c*) 2 : 1

(*b*) 1 : 2 (*d*) 1 : 4

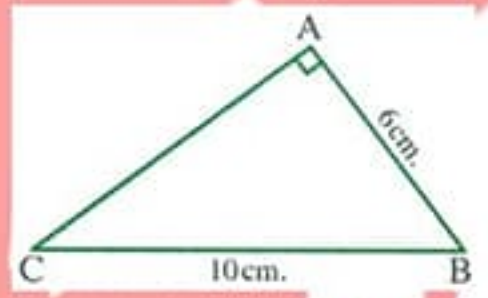


42 *if XYZL is a rectangle , then* $(XY)^2+(YZ)^2 = (\ldots\ldots)^2$

43

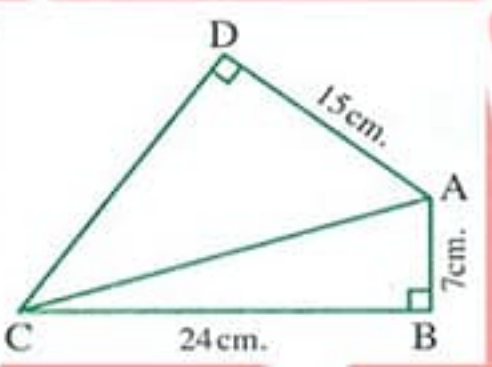


$m(\angle ACD) =$ .....

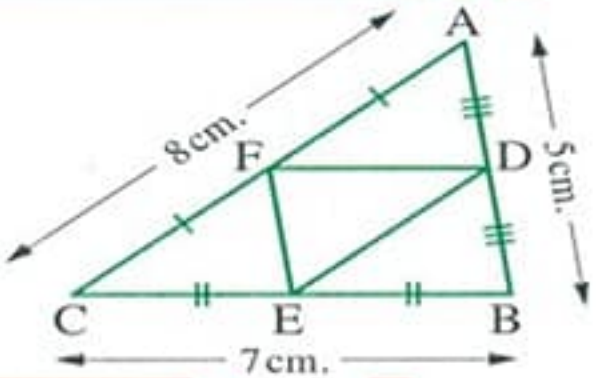


the length of $\overline{AC} =$ .....

44



the length of $\overline{CD} =$ .....



Perimeter of $\Delta DEF =$ .....

45 *The scalene triangle has ..... axes of symmetry*

46 The isosceles triangle has ..... Line (s) of symmetry , parallelogram has ..... Line(s) of symmetry

47 the equilateral triangle has ..... axes of symmetry

Choose the correct answer from those given:

1.	**Which of the following is the smallest number?** **$(314 \times 10^3$ or 3.14×10^4 or 31.4×10^5 or $0.314 \times 10^6)$**
2.	**If: x = 0.0009, then $\sqrt{x}$ = ...** **(0.0003 or 0.0081 or 0.003 or 0.03)**
3.	$\sqrt{\left(-\frac{2}{3}\right)^2}$ = ... **$(\frac{-4}{9}$ or $\frac{-2}{3}$ or $\frac{2}{3}$ or $\frac{4}{9})$**
4.	**If: $-x < 3$, then .....** **$(x > 3$ or $x > -3$ or $x < 3$ or $x < -3)$**
5.	**The age of Amer now is x year, then his age 5 year ago is .....** **$(5x$ or $5 + x$ or $5 - x$ or $x - 5)$**
6.	**If 3 y = 15, then 5 y = ...** **(5 or 15 or 25 or 125)**
7.	**The S.S. of the inequality: $3 < x \leq 4$ in $\mathbb{N}$ is .....** **$(\{3\}$ or $\{4\}$ or $\{3, 4\}$ or $\emptyset)$**
8.	**The side length of a square whose area is 9 x^2 cm^2. is .....cm.** **$(3x$ or $3x^2$ or $9x$ or $9x^2)$**

9.	If $x > y$, $z >$ zero, then $x\ z$ ..... $y\ z$ $(>$ or $<$ or $=$ or $\leq)$
10.	$\sqrt{9+16} = 3 +$ ..... (4 or 2 or 25 or 22)
11.	If $\frac{26}{x} + 1 = 14$, then $x =$ ..... (2 or 10 or 13 or 15)
12.	$\sqrt{10^2 - 6^2} =$ ..... (4 or 8 or -4 or ± 8)
13.	$4 \times 2^3 - 20 =$ ..... $(-48$ or 4 or 12 or 16)
14.	If $2x = 4$, then $3x + 1 =$ ..... (13 or 4 or 15 or 7)
15.	If $-x < 7$, then ..... $(x > 7$ or $x > -7$ or $x < 7$ or $x < -7)$
16.	The multiplicative in verse of the number $\sqrt{\frac{9}{25}}$ is ..... $(\frac{5}{3}$ or $\frac{3}{5}$ or $\frac{25}{9}$ or $\frac{9}{25}$)
17.	The S.S. of the equation: $3x = -9$ in $\mathbb{N}$ is ..... $(\{-3\}$ or $\{-6\}$ or zero or $\emptyset)$

18.	3.04×10^{7} = ... (340 000 or 304 000 or 3 400 000 or 30 400 000)
19.	2.37×10^{-4} = ... (0.00237 or 0.000237 or 23700 or 0.0000237)
20.	If 0.00079 = 7.9 a, then a = ... (10^{-1} or 10^{-3} or 10^{-4} or 10^{4})
21.	If $0.0000503 = m \times 10^{-5}$, then m = ... (503 or 5.03 or 50.3 or 0.503)
22.	If the thickness of a sheet of paper is 0.012 cm., then a ream of 400 sheet is of height ..... (48×10^{-3}cm. or 48×10^{-2}cm. or 4.8×10^{0}cm. or 48 cm.)
23.	Which of following equals $\frac{1}{2}$ milliard? (50×10^{8} or 5×10^{8} or 0.5×10^{8} or 500×10^{7})
24.	Which of following is the greatest? (6.3×10^{5} or 9.8×10^{4} or 5.2×10^{5} or 7.3×10^{4})
25.	Which of following is the smallest? (0.6×10^{5} or 0.25×10^{5} or 7×10^{4} or 17.5×10^{4})
26.	$6\,000 \times 50$ = ... (300×10^{2} or 30×10^{5} or 3×10^{5} or 30×10^{4})
27.	45×900 = ... (4.05×10^{2} or 4.05×10^{3} or 4.05×10^{4} or 45×10^{2})

28.	$0.7 \times 0.005 =$ ..... $(3.5 \times 10^{3}$ or 3.5×10^{-2} or 3.5×10^{2} or $3.5 \times 10^{-3})$
29.	$196 \div (7 - 5)^2 =$ ..... (50 or 49 or 28 or 48)
30.	$10 \times 4 - (2 \times 6 - 8) =$ ..... (5 or 6 or 36 or 50)
31.	$7\,(6^2 \div 2 \times 3) =$ ..... (378 or 300 or 606 or 38)
32.	$9 \times 10 + 20 \div 2 - 3 =$ ..... (90 or 80 or 97 or 100)
33.	$3 + [5 + 2(8 \div 4)] =$ ..... (10 or 20 or 12 or 30)
34.	$2 + 3\,[4 + (6 \times 3 - 8)] \times 2 =$ ..... (80 or 86 or 30 or 56)
35.	$\sqrt{a^4 b^8} =$ ..... (a^4b^8 or a^2b^4 or ab or a^4b^2)
36.	The multiplicative in verse of $\sqrt{0.49}$ in simplest from ..... ($\frac{10}{7}$ or 10 or 7 or 3.2)

37.	**The additive in verse of the number $-\sqrt{\frac{9}{16}}$ in the simplest from .....** **($\frac{4}{3}$ or $\frac{3}{4}$ or $\frac{5}{3}$ or 5)**
38.	$\sqrt{1\frac{9}{16}}$ = ... **($1\frac{3}{4}$ or $-1\frac{3}{4}$ or $1\frac{1}{4}$ or $-1\frac{1}{4}$)**
39.	$\sqrt{10^2-6^2}$ = ... **(4 or 8 or ± 4 or ± 8)**
40.	$\sqrt{18\times10\times10\times18}$ = ... **(18 or 180 or 10 or 100)**
41.	$\sqrt{\sqrt{81}}$ = ... **(81 or 27 or 9 or 3)**
42.	$\sqrt{2^2+\sqrt{25}}$ = ... **(3 or -3 or 9 or -9)**
43.	**If:** $\frac{x}{2}=\frac{8}{x}$ **, then** x = ... **(4 or -4 or ± 4 or 16)**
44.	**If:** $x=\sqrt{\frac{1}{4}}$ **, then** x^3 = ... **($\frac{3}{8}$ or $\frac{1}{8}$ or $\frac{1}{16}$ or $\frac{1}{64}$)**

45.	$\sqrt{(a+b)^3(a+b)}$ = ... ((a + b)^2 or a^4 + b^4 or $-$ (a + b)^2 or $\pm$(a + b)^2)
46.	$\sqrt{1} + \sqrt{4} + \sqrt{9} + \sqrt{16} + \sqrt{25} + \sqrt{36} + \sqrt{49} + \sqrt{64}$ = ... (6 or $\sqrt{204}$ or $\sqrt{81}$ or 6^2)
47.	The side length of the square whose area is 16 x^2 cm.^{2}= .....cm. (8 x or 4 x or 2 x or 8 x^2)
48.	If the age of a man now is x years then his age 5 years ago is ..... (x + 5 or x – 5 or 5 – x or x)
49.	If the age of a man now is y years then his age after 4 years is ..... (y + 4 or y – 4 or 4 – y or y)
50.	The rectangle with length equals triple its width is the length = x cm., then its width = ...cm. (3 x or $\frac{1}{3}$ x or $\frac{2}{3}$ x or x)
51.	If 2 x = 2, then 3 x – 1 = ... (2 or 3 or 4 or 5)
52.	If 2 x = 0, then x = ... (2 or 3 or 5 or zero)
53.	If 2 a b = 10, then 3 a b = ... (5 or 6 or 15 or 30)

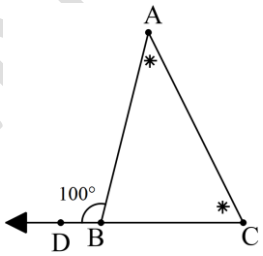
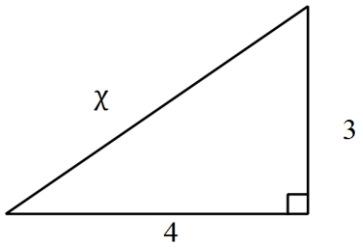
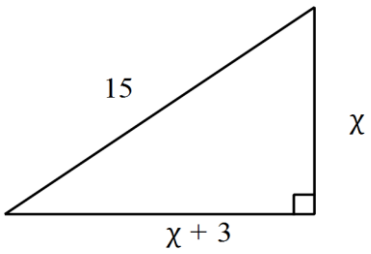
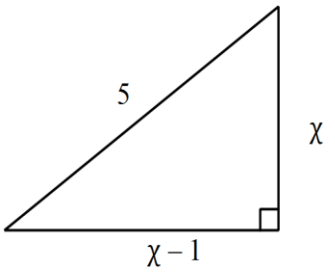
54.	If 0.2 + a = 5, then $\frac{a}{4}$ = ... (4.8 or 1.3 or 1.2 or 19.2)
55.	If 5 x +8 x + 2 x + 4 x = 114, then 5 x + 3 = ... (33 or 35 or 47 or 8 x)
56.	The S.S. of the equation $\frac{2a}{3}$ = 8 + 4 a in $\mathbb{Q}$ is = ... ($\{-2.4\}$ or $\{2.4\}$ or $\left\{-3\frac{1}{3}\right\}$ or $\{0\}$)
57.	Which of the following equations is equivalent to equation $x + 3 = 12$? ($x - 3 = -12$ or $x + (-3) = 12$) ($x - (-3) = 12$ or $x - (-3) = -12$)
58.	Which of the following equations is equivalent to equation $x - 12 = 15$? ($x + 12 = -15$ or $\frac{1}{3}x - 4 = 5$) ($x - 4 = -5$ or $x + 4 = 5$)
59.	If: $-x < 5$, then ..... ($x > 5$ or $x > -5$ or $x < 5$ or $x < -5$)
60.	If $x \in \mathbb{N}$, then the S.S. of the inequality $-x > 3$ is ..... ($\{4, 5, \dots\}$ or $\{-4, -5, \dots\}$) ($\{-3\}$ or $\emptyset$)
61.	$\frac{x}{3} < 4$ is equal to ..... ($x > \frac{4}{3}$ or $x < \frac{4}{3}$ or $x > 12$ or $x < 12$)

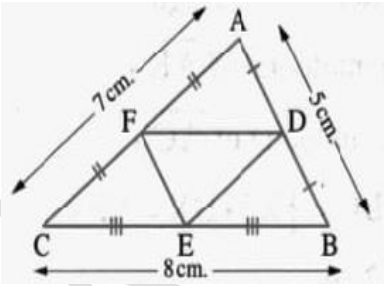
62.	**If $x \in \mathbb{Z}$, then the S.S. of the inequality $20 < 5x < 25$ is.....** **$(\{4\}$ or $\{5\}$ or $\{4,5\}$ or $\emptyset)$**
63.	**The S.S. of the inequality $-2x <$ zero in $\mathbb{Q}$ is .....** **$(\emptyset$ or $\mathbb{Q}_+$ or $\mathbb{Q}_-$ or $\mathbb{Z}_+)$**
64.	**The number of solutions of the inequality $\frac{1}{5} < x < \frac{2}{3}$, where $x \in \mathbb{Q}$ is .....** **(zero or 1 or 2 or an infinite number.)**
65.	**The number 2 belongs to the S.S. of the inequality ..... where x is an integer.** **$(x > 2$ or $x < 2$ or $-x > -3$ or $-x > 3)$**
66.	**If $x > 5$, then $-x$ .....** **$(< -9$ or ≥ -5 or < -5 or $> -5)$**
67	**If $x > y$, then $\frac{1}{x}$ ..... $\frac{1}{y}$, where $x \neq 0, y \neq 0$** **$(>$ or $<$ or $=$ or $\geq)$**

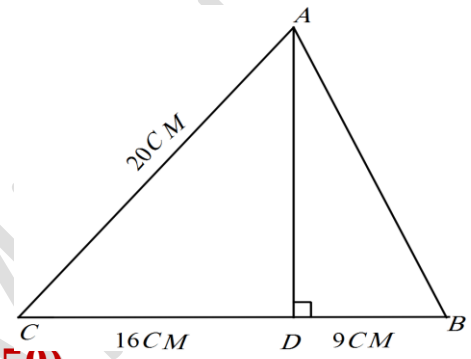
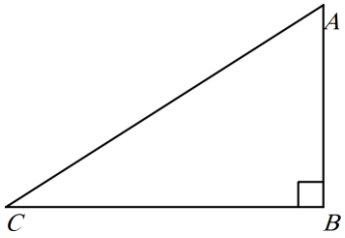
Answer the following questions:

Choose the correct answer from those given:

1.	**The measure of the exterior angle at any vertex of the equilateral triangle = ...** **(60° or 120° or 150° or 30º)**
2.	**If À (4, −5) is the image of A by translation $(x, y) \rightarrow (x - 2, y + 1)$ then the point A is .....** **((6, −4) or (4, −4) or (2, −4) or (6, −6)**
3.	**Any triangle has at least two ..... angles.** **(acute or obtuse or right or reflex)**
4.	**If the measures of two angles in a triangle are 30° and 50°, then the triangle is .....** **(acute-angled or right-angled)** **(obtuse-angled or equilateral)**
5.	**If Δ ABC is right-angled at B, AB = 20 cm. and AC = 25 cm., then BC= ..... cm.** **(225 or 400 or 15 or 10)**
6.	**In Δ ABC: if m (∠ B) = m (∠ A) + m (∠ C), then ∠ B is .....** **(acute. or right. or obtuse. or reflex.)**
7.	**Δ XYZ is right-angled at Y, XY = 12 cm., YZ = 5cm., Then XZ = ...cm** **(169 or 25 or 17 or 13)**
8.	**Δ ABC is right-angled at B, if the measure of the exterior angle at A is 120°, then m (∠ C) =.....** **(60° or 90° or 120° or 30°)**

9.	**The length of the line segment joining the midpoints of two sides of a triangle is equal to..... the length of the third side.** **(twice or half or third or quarter)**
10.	**In Δ ABC, if m (∠ A) = m (∠ C) – m (∠ B), m (∠ B) = 50°, then m (∠ A) =.....** **(40° or 90° or 50° or 45°)**
11.	**D∈ $\overrightarrow{CB}$, m (∠ ABD) = 100º, m (∠A) = m (∠ C), then m (∠ C) = ...** **(40º or 80° or 50° or 100º)** 
12.	**Which of the following relations is true?** **$x = 4^2 + 3^2$ or $x^2 = 4^2 – 3^3$** **$x^2 + 9 = 16$ or $x^2 = 25$** 
13.	**Which of the following relations is true?** **$x + 3 + x = 15$** **$x^2 + 3x = 108$** **$(x + 3)^2 = 15 – x^2$** **$x^2 + 6x + 9 = 225$** 
14.	**Which of the following relations is true?** **$x + (x – 1) = 25$** **$(x – 1)^2 – x^2 = 25$** **$x^2 + (x – 1)^2 = 5$** **$(x^2 – x = 12$** 

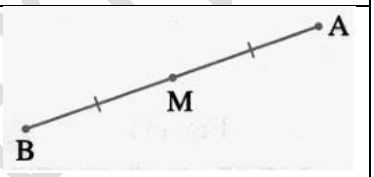
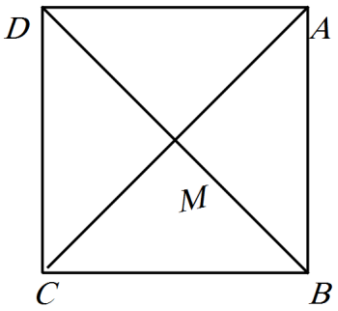
15.	**If ABCD is a square, then $(AC)^2$ = ...** **(AB or $(AB)^2$ or $2(AB)^2$ or $4(AB)^2$)**
16.	**AB = 5 cm., BC = 8 cm., AC = 7 cm., D, E and F are the midpoints of $\overline{AB}$, $\overline{BC}$ and $\overline{CA}$ respectively. The perimeter of: Δ DEF** **(15 or 10 or 20)** 
17.	**The image of the point (−2, 3) by translation of magnitude of 4 units in the negative direction of the y-axis is .....** **((2, 3) or (−2, 7) or (−6, 3) or (−2, −1))**
18.	**The sum of measures of the interior angles of a triangle equals the measure of ..... angle.** **(a right or a straight or an acute or a reflex)**
19.	**In Δ XYZ, if: m (∠ X) = 50°, m (∠ Y) = 100°, then: m (∠ Z) = ...** **(30° or 50° or 80° or 100°)**
20.	**In Δ ABC, if: m (∠A) + m (∠B) = 110°, then: m (∠C) = ...** **(110° or 90° or 70° or 55°)**
21.	**If the measures of two angles in a triangle are 35° and 45°, then the triangle is .....** **(acute-angled or right-angled)** **(obtuse-angled or equilateral)**
22.	**The measure of the exterior angle of the equilateral triangle at any one of its vertices equals .....** **(60° or 120° or 150° or 30°)**

23.	**In Δ ABC, if: m (∠B) > m (∠A) + m< (∠C), then ∠A is .....** **(acute or right or obtuse or reflex)**
24.	**In the opposite figure $\overline{AD} \perp \overline{BC}$, BD = 9cm DC = 16cm, and AC = 20cm then** **AD = (5 or 12 or 15)** **AB = (5 or 12 or 15)** **Area of Δ ABC = (15 or 120 or 150)** 
25.	**If the measures of an angles in a triangle equals the sum of measures of the other two angles, then the triangle is .....** **(acute or right or obtuse)**
26.	**If the measures of an angles greater than the sum of measures of the other two angles, then then the triangle is .....** **(acute or right or obtuse)**
27.	**If Δ ABC is right-angled at B then $(AC)^2$ = ...** **$((AC)^2 - (BC)^2)$** **$((AC)^2 - (AB)^2)$** **$((AB)^2 + (BC)^2)$** 

28.	**The number of axes of symmetry of**
a.	**The equilateral triangle is .....** **(2 or 3 or 4 or 6)**
b.	**The isosceles triangle is .....** **(2 or 3 or 1 or 0)**
c.	**The scalene triangle is .....** **(2 or 0 or 3 or 4)**
d.	**The parallelogram is .....** **(0 or 2 or 3 or 4)**
e.	**The rectangle is .....** **(0 or 2 or 3 or 4)**
f.	**The rhombus is .....** **(2 or 3 or 4 or 5)**
g.	**The square is .....** **(2 or 4 or 6 or 3)**
h.	**The trapezium which is not isosceles is .....** **(2 or 0 or 1 or 4)**
i.	**The isosceles trapezium is .....** **(2 or 0 or 1 or 4)**
j.	**The circle is .....** **(0 or 5 or 4 or in finite)**
29.	**The image of the point (5,0) in the ..... it self** **(y – axis or *x* – axis or origin)**
30.	**The image of the point (-5, 0) by reflection in the ..... it self** **(*x* – axis or y – axis or origin)**

31.	**The image of the point (2,5) by translation $(x, y) \rightarrow (x+2, y+1)$ is .....** **((2, 5) or (4, 6) or (1, 4))**
32.	**The image of the point (1,3) by reflection in the x – axis is.....** **((1, 3) or (1, −3) or (−1, 3))**
33.	**The image of the point (2,4) by reflection in the y – axis is .....** **((2, 4) or (−2, 4) or (2, −4))**
34.	**The image of the point (−1, −4) by reflection in the ..... is (1, –4)** **(y– axis or x – axis or origin point)**
35.	**The image of the point (3,2) by translation $(x, y) \rightarrow (x + 3, y - 2)$ is .....** **((6, 0) or (3, 2) or (0, 0))**
36.	**The image of the point (− 2, −5) by translation $(x, y) \rightarrow (x - 2, y)$ is .....** **((2, 5) or (−4, −5) or (4, 5))**
37.	**The image of the point (3, −2) by translation $(x, y) \rightarrow (x, y + 3)$ is .....** **((3, 1) or (2, −2) or (3, 5))**
38.	**The image of the point (− 1, 2) by translation of magnitude of 3 units in the positive direction of the x-axis is .....** **((−1, 5) or (2, 2) or (− 2, 2) or (− 1, 3))**

39.	**The image of the point (−3, 4) by translation of magnitude of 4 units in the negative direction of the y-axis is .....** **((−3, 0) or (−7, 4) or (−3, 8) or (−1, 4))**
40.	**If À (3,−3) is the image of A by translation $(x, y) \rightarrow (x - 1, y - 4)$, then the point A is .....** **((2, −7) or (4, 1) or (−4, −1) or (2, 1)**
40.	**The image of the point (−1, 4) by the translation (3, −2) followed by reflection in the x-axis is .....** **((2, 2) or (−2, 2) or (−2, −2) or (2, −2)**
41.	**If the point (a, – 1) is the image of (2, 4) by the translation $(x, y) \rightarrow (x + 1, y - b)$, then (a, b) is.....** **((3, 3) or (1, 3) or (3, 5) or (1, −5))**
42.	**The image of the point (−3,−5) by reflection in the x -axis is .....** **((3, −5) or (3, 5) or (−3, 5) or (−3, −5)**
43.	**The number of axes of symmetry of the equilateral triangle is .....** **(zero or 1 or 2 or 3)**
44.	**The image of the point (2, −7) by reflection in the origin point is .....** **((2, 7) or (−2, 7) or (−2, −7) or (2, −7))**

45.	**If À is the image of A by reflection in M and MA = 6 cm., then A À = ...** **(6cm. or 3cm. or 12cm. or 9cm.)**
46.	**If $\overline{\text{À}\grave{B}}$ is the image of $\overline{AB}$ by reflection in M, then $\overline{\text{À}\grave{B}}$..... $\overline{AB}$** **(> or < or = or ≠)**
47.	**The image of $\overline{AB}$** **By reflection in the point M is .....**  **($\overline{AM}$ or $\overline{AB}$ or $\overline{BA}$ or $\overline{BM}$)**
48.	**In the opposite figure:** **ABCD is a square whose diagonals** **Intersect at M The image of Δ ABM** **by reflection in M is Δ .....**  **(ADM or BCM or DCM or CDM)**
49.	**If À is the image of A by reflection in M and if MA=5 cm. , then A À = ...** **(5cm. or 7cm. or 10cm. 15cm.)**

Test (1)

Choose

1) If $750000 = 7.5 \times 10^{n}$, then n = ...

a) 4 b) 5 c) -4 d) -5

2) If x + 9 = 11 ,then the value of 7x = ...

a) 2 b) 20 c) 14 d) 40

3) $\sqrt{\frac{16x^2}{y^4}}$ = ...

a) 4x b) $\frac{4x}{y}$ c) $\frac{4}{y}$ d) $\frac{4x}{y^2}$

4) If $3x + 1 \geq 10$, then $x \geq$ ..... $x \in N$

a) 3 b) -3 c) 6 d) 14

5) The measure of the exterior angle of the equilateral triangle = ...°

a) 30 b) 60 c) 90 d) 120

6) The image of the point (-1 , 3) by reflection in X-axis is .....

a) (3 , 1) b) (3 , -1) c) (-1 , -3) d) (1 , -3)

7) If ABC is right-angled Δ at B , AB = 9 cm and AC = 15 cm ,then BC = ... cm

a) 6 b) 24 c) 144 d) 12

8) ABC is a triangle , if X is the midpoint of $\overline{AB}$ and Y is the midpoint of $\overline{AC}$, if BC = 13 cm , then XY = ... cm

a) 6 b) 6.5 c) 26 d) 7

Test (2)

Choose

1) If $4x = 20$, then $3x - 1 =$ .....

(a) 13 (b) 14 (c) 15 (d) 16

2) $\sqrt{(8)^2 + (6)^2} =$ .....

(a) 14 (b) 10 (c) 2 (d) 6

3) The S.S. of the inequality : $x < 3$ in $\mathbb{N}$ is .....

(a) $\{0\}$ (b) $\{0 , 1 , 2\}$ (c) $\{1 , 2\}$ (d) $\varnothing$

4) $2 \times 6 - 4 \div 2 =$ .....

(a) 10 (b) 2 (c) 12 (d) 6

5) The image of the point $(-1 , 3)$ by translation $(4 , -2)$ is .....

(a) $(3 , 1)$ (b) $(3 , -1)$ (c) $(5 , 1)$ (d) $(5 , -5)$

6) The line segment joining two midpoints of two sides of a triangle is ..... the third side.

(a) intersecting (b) parallel to (c) perpendicular to (d) congruent to

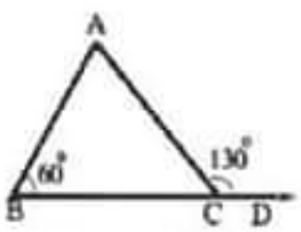
7) If ABC is a right-angled triangle at B and AB = 4 cm. , BC = 3 cm. , then AC = ... cm.

(a) 16 (b) 25 (c) 9 (d) 5

8) In the opposite figure :

m ($\angle$ A) = ...

(a) 40° (b) 50° (c) 60° (d) 70°



Test (3)

Choose

1) If $-x < 2$, then .....

(a) $x > -2$ (b) $x > 2$ (c) $x < -2$ (d) $x < 2$

2) The multiplicative inverse of the number $\sqrt{\frac{4}{9}}$ = ...

(a) $\frac{-3}{2}$ (b) $\frac{2}{3}$ (c) $-\frac{2}{3}$ (d) $\frac{3}{2}$

3) 0.0000068 = ...

(a) 6.8×10^{-6} (b) 6.8×10^{5} (c) 6.8×10^{-7} (d) 6.8×10^{7}

4) If $x + 9 = 11$, then the value of $7x$ = ...

(a) 9 (b) 14 (c) 2 (d) 13

5) The image of the point $(2 , -7)$ by reflection in the origin point is .....

(a) $(2 , 7)$ (b) $(-2 , 7)$ (c) $(-2 , -7)$ (d) $(2 , -7)$

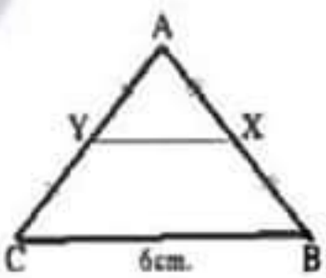
6) The measure of the exterior angle of the equilateral triangle is .....

(a) 30° (b) 45° (c) 60° (d) 120°

7) In the opposite figure :

XY = ... cm.

(a) 3 (b) 1 (c) 2 (d) 12



8) In ΔABC , if $m(\angle B) = 90°$, $AB = 20$ cm. , $AC = 25$ cm. , then BC = ... cm.

(a) 625 (b) 12 (c) 15 (d) 225

Test (4)

Choose

1) If $0.0035 = 3.5 \times 10^{n}$, then n = ...

(a) 2 (b) – 3 (c) – 2 (d) 3

2) If $3X = 6$, then $6X$ = ...

(a) 16 (b) 14 (c) 12 (d) 10

3) $\sqrt{(-8)^2 + (-6)^2}$ = ...

(a) 10 (b) ± 10 (c) 14 (d) – 14

4) The S.S. of the inequality : $X < 3$ in $\mathbb{N}$ is .....

(a) $\{0\}$ (b) $\{0 , 1 , 2\}$ (c) $\{1 , 2\}$ (d) $\varnothing$

5) The image of the point $(-1 , 4)$ by the translation $(X , y) \longrightarrow (X + 3 , y - 2)$

(a) $(2 , 2)$ (b) $(-2 , 2)$ (c) $(-2 , -2)$ (d) $(2 , -2)$

6) The image of the point $(-5 , 0)$ by reflection in X-axis is .....

(a) $(5 , 0)$ (b) $(0 , 5)$ (c) $(-5 , 0)$ (d) $(0 , -5)$

7) The measure of the exterior angle of the equilateral triangle = ...

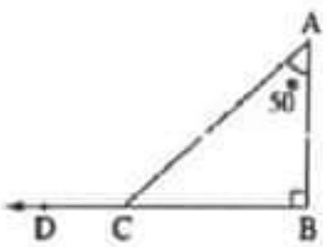
(a) 60° (b) 120° (c) 90° (d) 180°

8) In the opposite figure :

m (∠ ACD) = ...

(a) 40° (b) 140°

(c) 90° (d) 50°



Test (5)

Choose

1) The standard form of 0.0006 = ...

a) 6×10^{4} b) 6×10^{-4} c) 6×10^{3} d) 6×10^{-3}

2) $144 - 8 \div 2^{3}$ = ...

a) 17 b) 18 c) 144 d) 143

3) $\sqrt{25}$ = ...

a) 5 b) - 5 c) ± 5 d) 25

4) If $3x + 1 = 22$, then x = ... $x \in Q$

a) 21 b) $\frac{23}{3}$ c) 7 d) 63

5) The sum of measures of interior angles of a triangle = ...°

a) 90 b) 180 c) 270 d) 360

6) The image of the point (-1 , 3) by translation (4 , -2)is .....°

a) (3 , 1) b) (3 , -1) c) (5 , 1) d) (5 , -5)

7) If ABC is right-angled Δ at B , AB = 3 cm and BC = 4 cm ,then AC = ... cm

a) 7 b) 1 c) 5 d) 12

8) ABC is a triangle , if X is the midpoint of $\overline{AB}$ and Y is the midpoint of $\overline{AC}$, if XY = 4 cm , then BC = ... cm

a) 8 b) 2 c) 6 d) 10

Test (6)

Choose

1) If $-x > 4$, then .....

(a) $x > -4$ (b) $x > 4$ (c) $x < -4$ (d) $x < 4$

2) The age of Omar is x year , then his age 5 years ago is .....

(a) $5x$ (b) $5 + x$ (c) $5 - x$ (d) $x - 5$

3) $6000 \times 50 =$ .....

(a) 300×10^2 (b) 30×10^5 (c) -3×10^3 (d) 3×10^5

4) $\pm\sqrt{\frac{4}{9}} =$ .....

(a) $\frac{-4}{9}$ (b) $\frac{-2}{3}$ (c) $\pm\frac{2}{3}$ (d) $\frac{2}{3}$

5) The image of the point ..... is itself by reflection in y-axis.

(a) (0 , 3) (b) (3 , 0) (c) (3 , 3) (d) (– 3 , 3)

6) Any triangle has at least ..... acute angles.

(a) 0 (b) 1 (c) 2 (d) 3

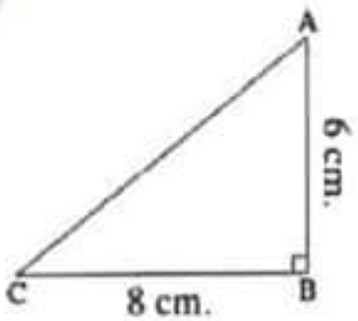
7) The image of (1 , 3) by translation (4 , 2) is .....

(a) (3 , 1) (b) (5 , 5) (c) (5 , 1) (d) (5 , – 5)

8) In the opposite figure :

ΔABC is right-angled at B , AB = 6 cm. , BC = 8 cm.

AC = ... cm.



(a) 6 (b) 8 (c) 10 (d) 14

Test (7)

Choose

1) $0.7 \times 0.005 =$ .....

(a) 3.5×10^{3} (b) 3.5×10^{-2} (c) 3.5×10^{2} (d) 3.5×10^{-3}

2) If $2x = 2$, then $3x - 1 =$ .....

(a) 2 (b) 3 (c) 4 (d) 5

3) $\sqrt{10^2 - 6^2} =$ .....

(a) 4 (b) 8 (c) -4 (d) ± 8

4) If $-x < 7$, then .....

(a) $x > 7$ (b) $x > -7$ (c) $x < 7$ (d) $x < -7$

5) If the measures of two angles in a triangle are 35° and 45° , then the triangle is .....

(a) acute-angled. (b) right-angled. (c) obtuse-angled. (d) equilateral.

6) The measure of the exterior angle of the equilateral triangle at any one of its vertices equals .....

(a) 60° (b) 120° (c) 150° (d) 30°

7) The point (5 , – 2) is the image of the point ..... by reflection in the origin point.

(a) (5 , – 2) (b) (– 5 , – 2) (c) (– 5 , 2) (d) (5 , 2)

8) The image of the point (– 3 , 4) by translation of magnitude of 4 units in the negative direction of the y-axis is .....

(a) (– 3 , 0) (b) (– 7 , 4) (c) (– 3 , 8) (d) (– 1 , 4)

Test (8)

Choose

1) $4 \times 2^3 - 20 =$ .....

(a) -48 (b) 4 (c) 12 (d) 16

2) If $-x < 7$, then .....

(a) $x > 7$ (b) $x > -7$ (c) $x < 7$ (d) $x < -7$

3) The multiplicative inverse of the number $\sqrt{\frac{9}{25}}$ is .....

(a) $\frac{5}{3}$ (b) $\frac{3}{5}$ (c) $\frac{25}{9}$ (d) $\frac{9}{25}$

4) The S.S. of the equation : $3x = -9$ in $\mathbb{N}$ is .....

(a) $\{3\}$ (b) $\{-6\}$ (c) zero (d) $\varnothing$

5) $\triangle XYZ$ is right-angled at Y , XY = 12 cm. , YZ = 5 cm , then XZ = ... cm.

(a) 169 (b) 25 (c) 17 (d) 13

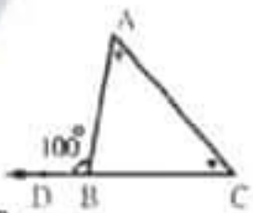
6) The length of the line segment joining the midpoints of two sides of a triangle is equal to ..... the length of the third side.

(a) twice (b) half (c) third (d) quarter

7) **In the opposite figure :**

$D \in \overrightarrow{CB}$, $m(\angle ABD) = 100°$

, $m(\angle A) = m(\angle C)$, then $m(\angle C) =$ .....



(a) 40° (b) 80° (c) 50° (d) 100°

8) The image of the point $(-1 , 4)$ by the translation $(3 , -2)$ is .....

(a) $(2 , 2)$ (b) $(-2 , 2)$ (c) $(-2 , -2)$ (d) $(2 , -2)$

Test (9)

Choose

1) If $750000 = 7.5 \times 10^{n}$, then n = ...

a) 4 b) 5 c) -4 d) -5

2) If $x + 9 = 11$,then the value of $2x$ = ...

a) 2 b) 20 c) 4 d) 40

3) The S.S. of the incquality : $x < 3$ in $\mathbb{N}$ is .....

(a) $\{0\}$ (b) $\{0 , 1 , 2\}$ (c) $\{1 , 2\}$ (d) $\varnothing$

4) $2 \times 6 - 4 \div 2 =$ .....

(a) 10 (b) 2 (c) 12 (d) 6

5) The image of the point $(2 , -7)$ by reflection in the origin point is .....

(a) $(2 , 7)$ (b) $(-2 , 7)$ (c) $(-2 , -7)$ (d) $(2 , -7)$

6) The measure of the exterior angle of the equilateral triangle is .....

(a) 30° (b) 45° (c) 60° (d) 120°

7) The image of the point $(-1 , 4)$ by the translation $(x , y) \longrightarrow (x + 3 , y - 2)$

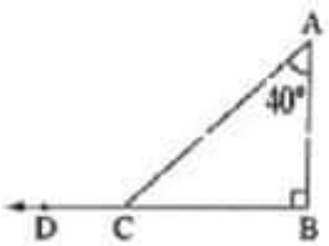
(a) $(2 , 2)$ (b) $(-2 , 2)$ (c) $(-2 , -2)$ (d) $(2 , -2)$

8) In the opposite figure :

m ($\angle$ ACD) = ...

(a) 40° (b) 140°

(c) 90° (d) 50°



Test (10)

Choose

1) If $-x > 4$, then .....

(a) $x > -4$ (b) $x > 4$ (c) $x < -4$ (d) $x < 4$

2) The age of Omar is x year , then his after 5 years ago is .....

(a) $5x$ (b) $5 + x$ (c) $5 - x$ (d) $x - 5$

3) $\pm\sqrt{25}$ = ...

a) 5 b) - 5 c) ± 5 d) 25

4) If $3x + 1 = 7$, then x = ... $x \in Q$

a) 2 b) $\frac{2}{3}$ c) 7 d) 6

5) The image of the point $(2 , -7)$ by reflection in the origin point is .....

(a) $(2 , 7)$ (b) $(-2 , 7)$ (c) $(-2 , -7)$ (d) $(2 , -7)$

6) The measure of the exterior angle of the equilateral triangle is .....

(a) $30°$ (b) $45°$ (c) $60°$ (d) $120°$

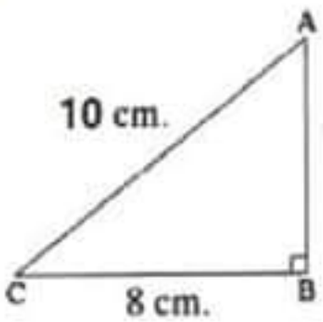
7) The image of $(1 , 3)$ by translation $(4 , 2)$ is .....

(a) $(3 , 1)$ (b) $(5 , 5)$ (c) $(5 , 1)$ (d) $(5 , -5)$

8) **In the opposite figure :**

ΔABC is right-angled at B , AC=10 cm. , BC = 8 cm.

AB =..... cm.



(a) 6 (b) 8 (c) 10 (d) 14